

A STUDY ON KALANJAHHA PADAI

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CONTENTS

| | PAGE No. |
|-------------|--|
| I | Introduction |
| | 1 |
| II | Aim and Objectives |
| | 6 |
| III | Review of Literatures |
| | |
| A. | Siddha Aspects |
| | 7 |
| B. | Modern Aspects |
| | 39 |
| C. | Drug |
| | 72 |
| IV | Materials and Methods |
| | 83 |
| V | Observation and Results |
| | 88 |
| VI | Discussion |
| | 99 |
| VII | Summary |
| | 105 |
| VIII | Conclusion |
| | 107 |
| | Annexure |
| i. | Preparation and properties of trial drug |
| | 108 |
| ii. | Bio-chemical Analysis |
| | 111 |
| iii. | Pharmacological Analysis |
| | 114 |
| iv. | Proforma of case Sheet |
| | 121 |
| | Bibliography |
| | 132 |
| | Acknowledgements |
| | 133 |

INTRODUCTION

“கற்ற குருவாக்குங் காதலித்த வாகடமும்

பற்றுக் கோலொன்றே பரிகாரம் - முற்ற

அவன் பொறுப்பல்லா லொன்று மாவதில்லையென்றே

இவனுணரக் கீர்த்தி இங்கு”

- நோய் நாடல் நோய் முதனாடல் பாகம் I

India, the land of “unity in diversity” popular not only for its tradition, heritage and culture but also famous for its own traditional system of medicine called “Indigenous system of medicine”. Indigenous system of medicine is the ancient one, it was believed to be originated from Lord Shiva, and then reached from Agasthiar to Siddhars. From siddhars this system of medicine was gifted to mankind.

Siddhars, they are not only physicians, but also social reformers, saints solved the human problems by their super natural power called siddhi, one who achieved siddhi is called “Siddhar”. The ultimate aim of siddhars is to attain etemal bliss. For attaining etemal bliss human body is considered to be media. This media must be protected from degeneration, aging and disease. So the siddhars followed specific type of life style and dietary style, which was also include in this system of medicine.

According to siddhars human body is constituted by five basic elements which also constituted the environment viz Nilam (Earth), Thee (Fire), Vayu (Air), Neer (Water) and Aahayam (Ether). The normal functioning of human body is based on homeostasis of three vital forces or humours called vatha, pitha and kapha. Any derangement in this homeostasis leads to pathological condition called “Pini” or “Noi”.

The factors, which maintain constant homeostasis of these three humours, are by six tastes (Arusuvai), life style, dietary habits paruvakalam etc.

Siddhars classified the diseases in to 4448 types. Siddhars diagnosing the diseases by means of envagai thervu, which includes nadi etc, neerkuri and neikuri, the “Precise diagnostic tool” of siddhars.

The advantage and unique features of siddha medicine is the removal of the root cause of the disease and effect, perfect remedy for mind and soul. Siddhars have enumerated ways that are to be followed to maintain the body without being affected by any disease and to maintain sound mind which are called karpamoraigal.

“Medicine” is defined as one which removes distress and leads an individual to perfect happiness (heavenly bliss).

“வேர்பாரு தலைபாரு மிஞ்சினக்கால் மெல்ல மெல்ல

பற்ப செந்தூரம் பாரே”

- அகத்தியர் வைத்தியம் பின் எண்பது

பதினெண் சித்தர் பாடிய சில்லறைக் கோவை.

The medicament with roots and leafs of the herbs are initiated, if uncontrolled then parpam and chendoorams are to be used.

Among the various types of disease, the Author has selected the kalanjaha padai (Skin disease) for her research subject.

According to this study Kalanjaha padai is correlated with psoriasis mentioned in modern medicine.

The skin is a protective covering of the body. It, with all its specialised derivatives makes up what is called the integument [Latin- covering], which covers the entire surface of the human body.

The human skin shows wide regional variations in structure like scalp, face, earlobes, back, palms and soles etc., In thickness of the skin the number of sebaceous glands, collagen fibre and vasculature.

Diseases of the skin are a common occurrence. About 10-20% of patients seeking medical advice suffer from skin diseases. While infections are more common in the tropics, chemical and psychogenic dermatoses are common in western countries. Diseases of the skin account for a great deal of misery, suffering, incapacity and economic loss. Besides this, they are a great handicap in society because they are visible.

According to Siddha system, our human body is made up of pancha-boothas. It leads to 96 thathuvas. The entire universe is also made up of pancha boothas. So any change in the cosmos will reflect in the human body. This was quoted in Sattamuni Gnanam by Sattamuni as follows,

அண்டத்தில் உள்ளதே பிண்டம்
பிண்டத்தில் உள்ளதே அண்டம்
அண்டமும் பிண்டமும் ஒன்றே
அறிந்து தான் பார்க்கும் போதே”

- சட்ட முனி

Pancha boothas give birth to seven thathus of body. This was quoted by Thirumoolar in Thirumandhiram as,

“இரதம் உதிரம் இறைச்சி தோல் மேதை
மருவிய வத்தி வாழும் பொடு மச்சை
பரவிய சுக்கிலம் பாழாம் உபாதி
உருவம் லாலுடல் ஒன்றெனலாமே”

- திருமந்திரம்

Among the pancha boothas, earth and fire together gives birth to the thathu ‘Thol’ (skin).

According to great Yugimuni, skin disorders are classified into 18 varieties. Yugi had not explained “Kalanjaga padai” as a separate disease. Instead he had made just mention in the vatha diseases as kalanjaga vatham which resembles “virpodaga kuttam”. The clinical features of Kalanjaga padai correlated with Psoriasis as described in Modern dermatology.

Siddhars had explained the line of treatment into two major modes, one is internal medicine and other is external medicine. As per the Siddha medicine, both internal and external medicines are 32 in numbers.

“வேர் பாரு தழை பாரு மிஞ்சினக் கால்

மெல்ல மெல்ல பற்ப செந்தூரம் பாரு”

- குணபாடம் தாது வகுப்பு

From the above stanza, it is ideal to choose herbal preparations. The author had selected **PADAIKKU CHOORANAM** as internal medicine and **VEPPAMPATTAI THYLAM** as external medicine.

Moreover, it is important to reduce mental stress, which is the main aggravating factor of Psoriasis. Life style modifications, Yoga therapy, transitional meditations, diet modifications etc., are given special emphasis to reduce the mental stress.

AIM AND OBJECTIVES

1. To collect the various Siddha literatures and modern text books as literal evidences regarding disease “Kalanjaga padai”.
2. To expose the talent of Siddhars in diagnostic principle.
3. To know the extent of correlation of aetiology, classification, symptomatology and diagnostic methods.
4. To have an idea of an incidence of Kalanjaga padai with reference to age, sex, socio-economic status, habits, and family history related to any psychosomatic problems and paruva kaalams (Seasons).
5. To have a complete study of the disease, under the topics of mukkutram, poripulungal, udal kattugal, enn vagai thervugal etc., in order to evaluate the pathology of Kalanjaga padai.
6. To have a detailed clinical investigation and to utilize the possible diagnostic tools in the confirmation of the diagnosis and prognosis of the disease.
7. To have a clinical trial Kalanjaga padai with **PADAIKKU CHOORANAM** as internal medicine and **VEPPAMPATTAI THYLAM** as external application.
8. To study the biochemical analysis and pharmacological analysis of the selected drugs.
9. To highlight the factors like land where they live, climate changes, diet and mental stress of human beings. To make an awareness among the patients in order to avoid further recurrence of the disease.

REVIEW OF LITERATURE

A. SIDDHA ASPECTS

In the Siddha medicine, the pancha bootha (five elements) are elaborately described. Our body which is formed by the combination of five boothas. "Thol"(skin) is a part of Prithvi. Skin is the largest organ in our body. It has got a lot of functions, each of which is important for the normal physiological functioning of whole human body, are regulation of body temperature, excretion, protection from pathogens etc.,

Man is very much influenced by his environment. Since skin serves as a link between man and Universe, it is the first organ to be influenced by the change also, since it is related intimately to the mind, it responds even to the slightest change in mind. Any disease affecting the skin causes a socio economic problem, mental torture and social stigma to the patient.

Definition (iyal)

Kalanjaha padai is a non contagious, non infectious, inflammatory disease of the skin characterized by well defined dry erythematous plaques with large adhered silvery or ivory mica like scales.

Aetiology (Noi varum vazhi)

Among the available Siddha literatures only Yugi Vaithiya Chinthamani and Thirumoolar Vaithiyam are the sources of informations on aetiology and clinical features of the eighteen types of skin diseases. There is no specific obvious information about the specific factors causing Kalanjaha padai.

Thirumoolar quotes as,

“பயல் மொழியீர் திரேகத்தில் கிருமி தானே
பரந்து திரி குட்டம் போல் புள்ளி காணும்
மயலதுவும் கிருமியுந்தா நடந்து புக்கில்
மேனியது சரசரென வெடித்து புண்ணாகும்”

- குரு நாடி

“குட்டமுடன் திரேகமெல்லாம் பறக்கும் போது
குழிகுழியாய் கிருமியினால் கொள்ளும் புள்ளி”

- குரு நாடி

”கிருமியால் வந்த தோடம் பெருகவுண்டு
கேட்கலதின் பிரிவதனை கிரமமாக
பொருமிவரும் வாயுவெல்லாங் கிருமியாலே
புழுக்கடிப்போல் காணுமது கிருமியாலே
செருமி வரும் பவுத்திரங்கள் கிருமியாலே
தேகமது சொறிக்குட்டம் கிருமியாலே
துருமி வருஞ் சுரோணிதங் கிருமியாலே
சூட்சமுடன் கிரிசைப்பால் தொழில் செய்வீரே”

- குரு நாடி

The text book of “Sirappu Maruthuvam” describes the following aetiological factors of Kalanjaha padai,

- பரம்பரை நோயாக மூவரில் ஒருவருக்கும் - of unknown aetiology and may be genetic
 - லசுன தாபிதம் - Tonsillitis
 - புப்புசப் பணிகள் - Respiratory diseases
 - ஒவ்வாமை - Allergic disorder
 - மன உளைச்சல் - Psychological disturbances
 - அதிர்ச்சி - Depression , anxiety
 - காலமாறுபாடுகள் - due to changes in humidity
- மேலும்,
- தாம்பிரச் செந்தூரம் (red oxide of copper)
 - இளம்பிள்ளைத் தடுப்பு மருந்து (polio vaccine)
 - குளொரோகுவின் (chloroquine)

முதலிய மருந்துகள் குருக்களையும் படையையும் உண்டுபண்ணலாம் என்றும் கூறப்பட்டுள்ளது.

In Siddha system of medicine chronic skin diseases are brought under the clinical entity kuttam. The ancient texts describe that eighteen types of kuttam .

Thirumoolar quotes as follows:

“குட்டமது விட கரப்பான் விட நீர் சூலை
சுரோணிதத்தால் தாது கெட்டுத் தடிப்புண்டாகும்
மட்டறவே கிருமி சென்று மருவும் போது
வகையாய் கிருமியுட விடநீர் சென்று
குட்டமுடன் தேகமெல்லாம் பறக்கும் போது
குழிகுழியாய் கிருமியினீர்க் கொள்ளும் புள்ளி
தட்டறவே கிருமியுட நீரால் வந்த
சகல குட்டம் விடகரப்பான் சாற்றலாமே”

“வியாதியுண் மூவாறு விளங்கிய குட்டங்கேள்
சுயாதி கிரந்தி சுழன் மேகத்தாலுறும்
பயாதி மண்ணுளப் பல வண்டினாலெட்டும்
நியாதிப் புழுநாலாய் நின்றதிக் குட்டமே”

Kuttam is named a common word of chronic skin lesion as for the Siddha text books.

Agasthiar had mentioned kanmam is the main cause for kutta noi.

Kanmavaralaru (Psycho social cause)

“பழவினையால் விஷப் பூச்சி கடித்தாலும்
பாதகர்க்கு ஒருநாளும் தீர்வதில்லை
உளவினையாலுடாபிக் கொள்ள வந்த
உண்மைய தறியாமல் மூர்க்கன் செய்வார்
களவினையுள் தீர்வதில்லை கடினமெத்த
கருணையுள்ள பூரணத்தில் கண்காட்சி
அளவினை நீ காணுமுன்னே அகலச் சொல்லு
அடையாளம் விரல் குறுகு பின்னால் கேளே
விரல் குறுகும் காஅல் நிமிறும் விஷம் போலேறும்
பாரான தேகமெல்லாந் தடித்து காணும்
பாதமெல்லாம் வெடித்து மிகப் புண்ணாய் காணும்
சரசமுடன் சொறி கரப்பான் பிணம் போல
தோணுள் சாந்தையாமே விந்தை கெடுத்தடி வீங்கும்
நா நல்கிலிந் நோய்க்கு மருந்தயராதே
நல்லோரை பீடிக்குங் குஷ்டங் கன்மமாமே”

- அகத்தியர் பரிபுரணம்-400

Thirumoolar has mentioned that the skin diseases are manifested in three ways,

1. Venereal origin and other mega diseases
2. Insect bites.
3. Infections and infestations.

In Yugimuni 800 he mentions,

“ஆச்சென்ற பதினெட்டு குட்டத்தாலும்
அவரவர்கள் செய்கின்ற அதர்மத்தாலும்
தேடிச் சென்ற சிவாலயத்திலுச் சிட்டங்கள்
செய்தவர்கள் சிவ நிந்தை பண்ணினார்கள்
மூச்சென்ற பெரியோரை துடித்தோர்கள்
மூர்க்கமாய் அடைக்கலத்தை எடுக்கின்றார்கள்
ஆச்சென்ற தினையளவில் குறைந்த கூலி
கொடுக்கன்றோர் குட்டத்திற் கூடுவானோ”

- யுகிமுனிபெருநூல் 800

Yugimuni strongly described only psycho-social factors are the main causes. They are stress inducing factors. He has attributed the following causes.

- Misbehavior in the temple.
- Sacrilege towards God.
- Humiliating the elders.
- Breach of trust.
- Paying low wages to workers.

The main factors behind the reasons are manifestation of stress which can be considered as precipitating factor. The psychic tranquility of the individual depends upon the harmony of social movements.

Hereditary also plays an important role in breeding Kalanjaha padai which appear in generations affecting several siblings and in such families the condition tends to be severe and persistent.

In **Yugi Chinthamani**, among the eighteen types of skin disease three types seen to be variants of Kalanjaha padai. But no description is available in the Siddha classics under Kalanjaha padai.

Out of the eighteen types of kuttam, 3 types have similarities with Kalanjaha padai and out of this three, one type is closely related with Kalanjaha padai.

CLINICAL FEATURES

Thethuru kuttam

“சர்மந்தான் சிவப்பாக வட்டணித்துச்
சலவை போல வெளுக்கும் தினவண்டாகும்
சுர்மந்தான் ரோமமது மிகவுண்டாகும்
மயிரெல்லாஞ் சுருண்டுமே உருண்டையாகும்
சர்மந்தான் பித்த சேடும மிகுக்கும்
காயந்தான் கதித்துமே திமிருண்டாகும்
தர்மந்தான் சடமெல்லா மூதலாகும்
தாக்கான தேத்திருக் குட்டந்தானே”

- யுகிமுனி பெருநூல் 800 முதல்பாகம்

Under Thethuru kuttam, annular erythematous lesions with the appearance of washed leather are described. Itching, oedema of the body and plugging of hairs are the characteristical clinical features of this entity.

Kajasarma kuttam

“தானாகச் சடந்தானு மிக கறுப்பாகும்
சடமெங்குந் தோலுரியும் சிவப்புமாகும்
வேனாக வறவறெனத் தானிழுக்கும்
வெடிக்குமே சொறிச்சலாய்த் தினவுண்டாகும்
தானாகச் சர்மக் குட்ட மிதிலுண்டாகும்
கடினமாய் கால் விரல்கள் கனப்புண்டாகும்
கூனாக தேகமெல்லாம் வலியெடுக்கும்
குறியான கசசர்ம குட்டந்தானே”

Blackish discolourations of the body, itching, oedema of the toes are indicated.

Virbodaga kuttam

“புதுமையாய் சரீரெங்கும் தினவுண்டாகும்
பொருவெடியாய் திக்கென தீக்கொழுந்து போல
மெதுமையாய் விட்டெரியும் நல்லபாம்பின்
விஷப்படம் போல் தடித்து வெளுப்புமாகும்
சுதுமையாய் மிகச் சொரியுஞ் சிவப்புமாகும்
தூக்கமொடு சஞ்சலமும் மிகவுண்டாகும்
கதுமையாய் தோலெல்லாம் தடிப்புண்டாகும்
கனத்த விற்போடகமான குட்டந்தானே”

An Erythematous lesion in the skin with plaques of silvery scales is described. The lesions are described to be extensive. Usually these entities are associated with anxiety and despair.

The oedema and plugging of hairs are not noticed in practice as it is in the case of **Thethuru kuttam**.

The blackish discolouration of the body, oedema of the toes is noticed in practice as in Kajasarma kuttam. It is seen only in the complication stage of Kalanjaha padai.

So the clinical features of Virbodaga kuttam are ascertained to be closely to Kalanjaha padai.

In the text Siddha Maruthuvam Sirappu authored by Sri. Dr. R. Thiagarajan, clinical features are described as,

- The skin lesions are red in colour with raised margins and white ivory or silvery rough thick scales, on removing the scales pinpoint blood-stained spots occurs.
- The lesions vary in size either thin or thick layers.
- In children these lesions may be like water drops.
- In severe cases lesions occur in the face, scalp and sometimes all over the body.

IN A CHRONIC CASE:

- The skin lesion occurs in the extensor aspect of forearm.
- In some cases these lesions appear over the palms and soles.
- In some cases these lesions appear all over the body.
- The lesions are coin shaped and there may be small pus formed lesions are found.
- In obese women, the lesions may occur over navel, inguinal region and axilla with discharge. Due to sweating, itching may be associated. The borders of the lesions are not to be demarcated clearly.
- One fourth of the patients have lesions over nails which are pink coloured and associated with ridges.
- 7 % of the patients have associated joint involvement which will manifest as **Psoriatic Arthropathy**.

ARTHROPATHY

If the patient suffers from repeated episodes of Kalanjaha padai it may be associated with painful joints known as Kalanjaha vatham.

“Yugimuni” describes the clinical features of “**Kalanjaha vatham**” as follows,

“வாதமாங் கால் கையில் குரங்கிரண்டும்.

வருத்து சந்து முறுக்கியே குடைந்து நொந்து

நாதமா நடைதானுந் தான் கொடாமல்
நலிந்துமே முடமாகி கரடு கட்டி
சேதமாஞ் சடந்தானு மிக வெளுத்துத்
தினவொடு சிரங்குமாய் சேட்பமாகி
காதமாயருசியோடு மயக்கமாகும்
கருதிய காளாஞ்சகமாம் வாதுமாமே”

- யுகி வைத்திய சிந்தாமணி பாடல் - 259

NOI KANIPPU (Diagnosis)

Piniyari muraimai is a method of diagnosing a disease. It is based upon three main principles. They are,

- Poriylarithal (Inspection)
- Pulanalarithal (Palpation)
- Vinathal (Interrogation)

Physicians 'pori' and 'pulan' are used as tools for examine the 'pori pulan' of the patient. The above principles correspond to the methodology of 1. Inspection, 2. Interrogation 3. Palpation in modern medicine, in arriving a clinical diagnosis of the disease.

1. PORIYALARITHAL

Pori is considered as the five senses of perception namely,

- Nose
- Tongue
- Eye
- Skin
- Ear

'Poriylarithal' is examining the pori of the patient by the physician for diagnosing.

2. PULANALARITHAL

'Pulan' is five object of senses. They are

- Smell
- Taste
- Vision
- Sensation to touch
- Hearing

'Pulanalarithal' means examining the 'pulan' of the patient by the physician for diagnosing purpose.

3. VINATHAL

Vinathal is gathering the informations regarding the history of the disease, its clinical features etc., from the patient or his immediate relatives who are taking of him, when the patient is not in a position to speak or the patient is a child.

ALAVAIGAL (logics)

Alavaigal are used in clinical diagnose of a disease

“அளவை காண்டல் கருதல் உரை அபாவம் பொருள் ஒப்பாற்றென்பர்

அளவை மேலும் ஒழிபுண்மை யைதிகத் தோடியல் பென நான்

களவை காண்பர் அவையிற்றின் மேலும் அறைவர் அவையெல்லாம்

அளவை காண்டல் கருதல், உரை என்னும் மூன்றிலடங்கிடுமே”

- சிவசித்தியார் அளவை எண் 6

Alavai divided in to ten types. They are,

- | | | |
|----------------------------|---|---------------|
| • Observation | - | காண்டல் |
| • Inference | - | கருதல் |
| • Authority, Literature | - | உரை |
| • Preception | - | அபாவம் |
| • Presumption | - | அருத்தப்பத்தி |
| • Comparison | - | உபமானம் |
| • Inference by elimination | - | பாரிசேஷம் |
| • Probability | - | சம்பவம் |
| • Tradition | - | ஐதிகம் |
| • Natural Inference | - | இயல்பு |

The above mentioned "ten alavaigal" are included in three alavaigal.

They are,

- **Kaandal (Inspection by Siddha method)**

Through 'kaandal' the physician can directly see the patient, hear all the complaints and at length concludes a diagnosis.

- **Karuthal (Through Siddha Investigation)**

Through envagai thervu and neerkuri as well as neikuri, we can diagnose a disease by karuthal.

- **Urai (Text's evidence - Siddhar's)**

Comparative study of the signs and symptoms of the patient with the reference of books and come to a diagnosis.

Ennvagai thervugal (eight diagnostic tools)

Siddhars have developed a unique method of diagnosing the disease by "Enn vagai thervugal"

“நாடி ஸ்பரிசம் நா நிறம் மொழி விழி

மலம் மூத்திரமிவை மருத்துவராயுதம்”

- நோய் நாடல் நோய் முதல் நாடல் (முதல் பாகம்)

“மெய்க்குறி நிறம் தொனி விழி நா இருமலம் கைக்குறி”

- தேரையர்

Hence the diagnosis is made by the following

- | | |
|----------------------------------|----------------------|
| 1. Naadi (Pulse) | 5. Mozhi (voice) |
| 2. Sparisam (sensation to touch) | 6. Vizhi (eyes) |
| 3. Naa (tongue) | 7. Malam (Faeces) |
| 4. Niram (colour) | 8. Moothiram (Urine) |

Kalanjaha padai in relation with envagai thervugal

1. Naadi (pulse)

உடலில் உயிர் தரித்திருப்பதற்குக் காரணமான சக்தி எதுவோ, அதுவே தாது அல்லது நாடி எனப்படும்.

“நாடி என்றால் நாடியல்ல, நரம்பில் தானே

நலமாகத் துடிக்கின்ற துடிதானுமல்ல

நாடி என்றால் வாத பித்த சிலேற்பனமுமல்ல

நாடி எழுபத்தீராயிரந் தானுமல்ல

நாடி என்றால் அண்ட பேரண்டமெல்லாம்

நாடி எழுவகைத் தோற்றத்துள்ளாய் நின்ற

நாடியதுயா ராய்ந்து பார்த்தாரானால்

நாடியுறும் பொருள் தெரிந்து நாடு வாரே”

- பதினெண் சித்தர் சதக நாடி நூல்

Naadi is responsible for the existence of life and can be felt one inch proximal to the wrist on the radial side by means of palpation with the tips of index, middle and ring fingers corresponding vatham, pitham and kabam respectively.

The three humours vatham, pitham and kabam exist in the ratio 1:1/2:1/4 normally. Derangement in these ratios leads to various disease entities.

The three "Uyir thathukal" are formed by the combination of three nadigal with three vaayu.

- | | | |
|------------------------|---|--------|
| • Idakalai + Abanan | - | Vatham |
| • Pingalai + Piranan | - | Pitham |
| • Suzhimunai + Samanan | - | Kabam |

In Kalanjaha padai the following types of naadi were observed.
They are,

- Vatha kabam and
- Vatha Pitham

2. Sparisam (sense to touch)

This reveals about the warmth, chillness, dryness, roughness of the skin, oozing, sweating, tenderness, fissures, depigmentation changes in the skin, swelling, emaciation, etc.,

In Kalanjaha padai thickness, roughening, dryness, pin point bleeding, silvery or mica like or ivory colour dry scales in skin may be noticed.

3. Naa (Tongue)

The colour, dry or wet, coated or not, excessive salivation, redness, ulceration, fissure, pallor, yellowish discolouration, any malignant outgrowth, predominant taste in tongue, speech and deviation of the tongue, along with the conditions of the teeth and gums are to be noted.

In Kalanjaha padai, tongue coating like flour (khgbT)) may be noticed in some cases may be due to habitual constipation.

4. Niram (colour)

Changes in the colour of the skin, teeth, eyes, nails and lips due to vatham, pitham, kabam, hypo and hyper pigmentation are to be noted. In Kalanjaha padai, erythematous lesions, pin point bleeding after removing the scales may be noticed.

5. Mozhi (voice)

Examination of mozhi includes clarity of speech any speech disturbances, crying, high or low pitched voice, slurring or incoherent speech, scanning speech, talk included by hallucination, undue argument, breathlessness, nasal or hoarseness of voice, wheezing. In Kalanjaha padai no change is seen regarding speech.

6. Vizhi (eyes)

The motor and sensory activities are to be noted. Also any abnormal colour change indicating vatham, pitham, kabam and mukkutram. Hyperemia, ulceration, bluish discolouration, response of pupil, pallor, protrusion, sunken eyes, sharpness of vision, excessive lacrimation, angle of eye, subconjunctival bleeding, visual disturbances are to be noted. In Kalanjaha padai burning sensation was reported in some cases.

7. Malam (faeces)

Colour, froth, solidity, semisolid or liquid quantity, odour, frequency, constipation, presence of mucus, blood and undigested matter in the stool are to be studied. In some of the cases of Kalanjaha padai habitual constipation was reported.

8. Moothiram (urine)

Collection of urine for the determination of neerkuri and neikuri is a special diagnostic method.

Neerkuri and Neikuri

“அருந்து மாறிரதமும் அவிரோமதாய்
அஃகல் அலர்தல் அகாலவூன் தவிர்ந்தழற்
குற்றள வருந்தி உறங்கி வைகறை
ஆடிக் கலசத் தாவியே காதுபெய்
தொரு முகூர்த்தக் கலைகுட் படுநீரின்
நிறக்குறி நெய்க்குறி நிருமித்தல் கடனே”

- சித்த மருத்துவாங்க சுருக்கம்

Prior to the day of urine examination the patient was instructed to take a balanced diet and quantities of food must be proportionate to his routine in take. The patient could have no disturbed sleep. After waken up in the morning, the first urine voided was collected in a clear wide mouthed glass container and is subjected to analysis of "neerkuri and neikuri" with in one and a half hour. Then neerkuri is to be found out by,

Neerkuri

“வந்த நீர்க்கரி யெடை மணம் நுரை எஞ்சலென்
றைந்திய லுளவை யறைகுது முறையே”

- சித்த மருத்துவாங்க சுருக்கம்

Voided urine has the following characters:

- Niram : Colouration
- Edai : Specific gravity
- Manam : Smell
- Nurai : Frothy nature
- Enjal : Quantity of urine voided

Apart from these, the frequency of urination, abnormal constituents such as protein, presence of blood, pus, renal calculus, crystals etc., also to be found out.

In Kalanjaha padai patient, straw or hey coloured urine is noticed. Scanty micturition can be noted in some cases.

Neikuri:

The speciality of neikuri is stated in the following verse:

“ஐக்குறி கொடுவட வானிழ லமர்ந்தோர்
கைக்குறி தெரிந்த நங் கடவுளைத் துதித்தே
மெய்குறி நிறந்தொனி விழி நாவிருமலம்
கைக்குறி முழுவதூ உங்கற்றார் தம்மினும்
பொய்க்குறி மெய்குறி புகலுமெ வர்க்கும்
நெய்க்குறி யதனை யிந்நீணிலந்து ரைப்போம்”

-சித்த மருத்துவ நோய் நாடல் நோய் முதனாடல்திரட்டு

The collected specimen as said above is to be analysed by following method. The specimen is kept open in a glass dish or china clay container. It is to be examined under direct sunlight, without shaking of the vessel. Then add one drop of gingelly oil at a distance of 1/2" or 3/4" height observe keenly the direction it spreads with in few minutes, and conclude the diagnosis as follows:

“அரவென நீண்டி னஃதே வாதம்

ஆழிபோற் பரவின் அஃதே பித்தம்

முத்தொத்து நிற்கின் மொழிவ தென் கபமே

அரவில் ஆழியும் ஆழியில் அரவும்

அரவில் முத்தும் ஆழியில் முத்தும்”

- சித்த மருத்துவ நோய் நாடல் நோய் முதனாடல் திரட்டு

| | |
|--------------------------------|--------------|
| Oil spreads like a snake | Vatha neer |
| Oil spreads like a ring | Pitha neer |
| Oil kept remaining as such and | Kaba neer |
| Floating like a pearl | |
| Ring in the snake | Thontha Neer |
| snake in the ring | |
| pearl in the snake | |
| pearl in the ring | |

Paruvakaalam (season)

The whole year is constituted by 6 seasons .They are

1. Karkaalam - Aavani- purattasi - August - September
2. Koothir kaalam - lyppasi -karthigai - October - November
3. Munpani kaalam - Markazhi- Thai - December -January
4. Pinpani kaalam - Masi- Panguni - February- March
5. Elavenil kaalam - Chithirai - Vaigasi - April- May
6. Mudhuvenil kaalam - Aani - Aadi - June – July

In each and every season, routine changes will occur in the land, normal biological functions of individual, living things, plants, animals, human beings, which will modify the normal physiology and make them susceptible to certain specific disease.

Kabam gets thannilai valarchi in pinpani kaalam and Vetrunilai valarchi in Elavenil kaalam. Pitham gets Thannilai valarchi in Kaar kaalam and Vetrunilai valarchi in Koothir kaalam, Vatham gets Thannilai valarchi in Mudhuvenil kaalam and Vetrunilai valarchi in Kaar kaalam.

Nilam (land)

It is divided in to five types

| S. No | Nilam | Land Area, it concerns |
|-------|----------|--|
| 1. | Kurinchi | - Mountain region and surroundings |
| 2. | Mullai | - Forest regions and surroundings |
| 3. | Marutham | - Cultivating regions and surroundings |
| 4. | Neithal | - Sea and Coastal regions |
| 5. | Palai | - Desert land only |

Udal kattugal.

Our body consists of seven udal kattugal, gives strength and structure to our body.

| S.No | Udal Kattugal | Functions |
|------|-----------------------|--|
| 1 | Saaram | It gives strength to the body and mind |
| 2 | Senneer | Saaram after absorption is converted into senneer. It is responsible for knowledge, strength, boldness and healthy complexion. |
| 3. | Oon | Gives structure and shape to the body and is responsible for the movements of the body. |
| 4. | Kozhuppu | Lubricates the organs and proceed on its own works. |
| 5. | Enbu | Protects the vital organs and used for movements and nominates body structure. |
| 6. | Enbu Moolai | Present inside the bones and it gives strength and maintains the normal condition of the bone. |
| 7. | Sukkilam / Suronitham | Responsible for the reproductive function of species. |

In the case of Kalanjaha Padai, out of seven udalkattugal saaram, senneer and enbu are commonly affected.

Saaram : Dryness, roughness, tiredness

Senneer : Dryness, Paleness of the skin

Enbu : Pain in the knee joints

MUKKUTRAM

Human body is influenced by Thridoshas (ie) Vatham, Pitham and Kabam. They are responsible for normal physiological condition of the body.

VATHAM

Vatham is a kinetic energy which influences all motions.

Vatham is located in the abanan, faeces, idakalai, spermatic cord, iliac bone, skin, nerves, joints, hair follicles, muscles, bone, ear and thigh.

| S. No | Name | Location | Physiological Functions |
|-------|---------|--|--|
| 1 | Piranan | Heart and Lower respiratorytract to Upper respiratory tract. | Controls knowledge, mind and five objects of sense,useful for breathing |
| 2 | Abanan | Lower abdomen and extremities | Responsible for urination, expels faeces, delivering foetus, discharge sperm and menstruation. |

| | | | |
|----|--------------|-------------------|--|
| 3 | Viyanan | Mainly at heart | Responsible for movements of all parts of the body and used to feel the sensation. |
| 4 | Uthanan | Chest | Responsible for vomiting, cough, hiccough, sneezing. |
| 5 | Samanan | Stomach | Aids for proper digestion. It controls the activity of other vaayus. |
| 6 | Naagan | Eyes | Responsible for opening and closing of the eyes. |
| 7 | Koorman | Heart and Eyes | Responsible for vision and yawning and controls lacrimation |
| 8 | Kirukaran | Throat | Responsible for salivation nasal secretion and appetite |
| 9 | Thevathathan | Eruvaai& Karuvaai | For laziness, sleeping and anger |
| 10 | Thananjeyan | Nose | Responsible for bloating of the body after death. It escapes on the third day after death, through the cranium when it bursts. |

In the case of Kalanjaga padai,

Abanan : Habitual constipation

Viyanan : Erythematous plaques in the affected areas of skin

Samanan : Due to other vaayus, it is affected

Koorman : Insomnia like condition

The above vaayus are affected commonly.

PITHAM:

Pitham is responsible for all the transformation. Pitham is located in urinary bladder, heart, head, pingalai, umbilicus, abdomen, piranan, blood, sweat, skin and eye.

Pitham is classified into 5 types. They are,

- | | | |
|--------------------|---|---|
| 1. Analaga pitham | : | Responsible for digestion of food |
| 2. Ranjaga pitham | : | Responsible for colour of blood |
| 3. Sathaga pitham | : | Located in heart and is responsible for normal activities of the body |
| 4. Aalosaga pitham | : | Responsible for normal vision |
| 5. Prasaga pitham | : | Responsible for the complexion of skin |

In the case of Kalanjaha padai,

- | | | |
|--------------|---|--|
| 1. Ranjagam | : | Paleness of the skin, conjunctiva and tongue |
| 2. Sathagam | : | Difficulty to do the routine works properly and sluggishness |
| 3. Pirasagam | : | Dryness and Roughness of the skin. |

KABAM:

Stabilizes, maintains and lubricates all movements.

Kabam is found in saman, semen, brain, head, tongue, nose, bones, bone marrow, fat, nerves, chest, blood, large intestine, eye, stomach and pancreas.

Kabam is classified into 5 types, they are,

1. Avalambagan : Heart is the centre for avalambagan. It controls all other forms of kabam
2. Kiletham : Stomach is the centre for kiletham. It gives moisture and softness to the ingested food, and helps for digestion.
3. Pothagam : Tongue is the centre for pothagam and it is responsible for the sense of taste
4. Tharpagam : Head is the centre for tharpagam. It gives cooling effect to eyes
5. Santhigam : It lies in the joints and is responsible for the locomotive action of movable bony joints.

In the case of Kalanjaha padai,

Tharpagam : Burning sensation in the eye

Santhigam : Pain in kneejoints, elbow and inter phalangeal joints.

UDAL VANMAI (Body Immunity)

The Udal Vanmai is classified into 3 types. They are,

- Iyarkai Vanmai
- Seyarkai Vanmai
- Kaala Vanmai

IYARKAI VANMAI

Natural immunity of the body itself by birth.

SEYARKAI VANMAI

Improving the health by intake of nutritious food materials, activities and medicines.

KAALA VANMAI

Development of immunity according to age and the environment.

When Udalvanmai is affected there may be a possibility of Kalanjaha Padai.

Line of treatment

In accordance with the Siddha system of medicine, certain basic principles are developed before starting the specific drug therapy. These procedures are initially followed to balance, the deranged kutrams ie. Vatham, pitham and kabam. They are purgation, vomiting and application of drugs on the eyes to balance the deranged vatham, pitham and kabam respectively. This can be understood by the following verbs,

“விரேசனத்தால் வாதம் தாழும்

வமனத்தால் பித்தம் தாழும்

அஞ்சனத்தால் ஐயம் தாழும்”

In addition to this following medications are practiced in the Siddha system.

- Aha marunthugal (Internal medicines)
- Pura marunthugal (External medicines)
- Restriction regarding food habits and routine day to day life style.
- Sirappu Maruthuvam - a special feature of Siddha medicine like Pranayamam, Yoga.

- **AHA MARUTHUVAM :**

These are to administer rejuvenating drugs adopted for every one healthy life **Padaikku Chooranam – 1gm** three times a day with hot water.

- **PURA MARUTHUVAM:**

Veppampattai thylam - applied as an external application

Restriction Regarding Food and Habits

1. Avoid Karappan food Items

“பெருகுஞ் சோள மிறுங்கும் பெரும் கம்பு

வரகு காருடன் வாழையின் காயொடு

உரை கொள் பாகற் கெளிற்று மீன் உண்டிடில்

விரிவதாய் கரப்பானு மிகுந்ததே”

- பதார்த்த குண சிந்தாமணி

2. Avoid bitter guard, guava, egg, fish, chicken
3. Obese must be restricted.
4. Avoid alcohol, smoking etc.
5. Should not be mentally stressed and strained
6. Since it is a chronic and not a life threatening disease, it should not be loaded with heavy drugs.
7. The medications should calm the mind just free from stress and strain
8. The patches should be washed with lukewarm water, to remove the scales everyday early morning. After the bath, external applications are to be applied there after.

SPECIAL NON - DRUG THERAPEUTICS

Several special medicaments of non-drug therapeutics like Yoga, Pranayamam, Asanas, Kalpa medicines are employed in Siddha system. These are employed during diseased state and for the prevention of diseases during healthy days.

In Kalanjaha padai, patients are also advised to follow Pranayamam, Yoga and Asanas for the early cure, in order to avoid the remissions and exacerbation of this disease.

PRANAYAMAM

It is a form of Kayakalpa method. By practicing this one can prevent any disease. This is explained in the following verse,

“ஏற்றி இறக்கி இருகாலும் பூரிக்கும்
காற்றைப் பிடிக்கும் கணக்கறி வாரில்லை
காற்றை பிடிக்கும் கணக்கறி வாளாக்கு
கூற்றை உதைக்கும் குறியதுவாமே”

YOGA:

Yoga is maintained by the body in a particular posture for a particular period of time. This is totally different from the ordinary exercise. Yoga vitilises, both physical body and the mental set-up unlike exercise which tones only the muscles.

The common benefits are,

- It tones the internal organs
- It prevents obesity and disease
- It maintains normal circulation to all the organs of the body.
- It is very safeguard for all the vital organs.
- It avoids laziness, enhances pure mind and cleverness and memory power. There will be no problems like psychomotive disturbances if practised daily.

ASANAS

Regarding skin disease the following Asanas can be advised

1. பத்மாசனம்
2. சர்வாங்காசனம்
3. பூரண சவசாந்தி ஆசனம்

1. பத்மாசனம்

சமதளத்தில் சம்மணமிட்டு உட்கார்ந்து வலப்பாதத்தை இடத் தொடை மீதும், இடப்பாதத்தை வலது தொடை மீதும் ஏற்றி இரண்டு கைகளையும் முன் புறம் ஒன்றன் பின் ஒன்றாக கோர்த்து மலர்ந்திருக்குமாறு இருத்தல், இதனால் உடல் நலமும் மன மகிழ்ச்சியும் ஏற்படும்.

2. சர்வாங்காசனம்

மல்லாந்து படுத்து கால்களை மெதுவாக ஒட்டியபடியே மேலே தூக்கிப் பின் புட்ட பாகத்தையும், இடுப்புப் பாகத்தையும் மேலே தூக்கிக் கைகளால் முதுகுப் புறத்தில் தாங்கி நிற்கல்.

நரை, திரை, மூப்பு மாறி இளமையுண்டாகும்.

வீதனகோளம் தூண்டப்படுகிறது.

உடலின் எல்லா உறுப்புகளும் பலப்படும்.

3. பூரண சவசாந்தி ஆசனம்

மல்லாந்து படுத்துக் கால்களை நேராகவும், கைகளை உடலோடு பக்கவாட்டிலும் வைத்து நேராகப் படுத்து இருத்தல்.

இது களைப்பைப் போக்கும். புத்துணர்ச்சியை உண்டாக்கும்.

PATHIYAM

Disease mainly occur due to wrong diet habits. Siddhars stressed this in every aspect of treatment and prevention from further occurrences. This view is well understood in this verse.

“மருந்தென வேண்டாவாம் யாக்கைக்கு

அருந்தியதுயற்றது போற்றி யுணின்”

- குறள்

During diseased states, diet restrictions or pathiyam are strictly to be followed. These are to be administered to normalize the deranged doshas and for the good manifestation of given medicines to be more effective. This is given in the verse,

“பத்தியத்தினாலே பலன் உண்டாகும் மருந்து

பத்தியங்கள் போனால் பலன் போகும் - பத்தியத்தில்

பத்தியமேவெற்றி தரும் பண்டிதர்க்கு - ஆதலினால்

பத்தியமே உத்தியென்று பார்”.

- தேரையர் வெண்பா

So it is very essential to adhere pathiyam strictly for the early cure of the disease.

DIET

Food habits that reduce the vatha, pitha, kaba to the normal level has to be taken. Patients are strictly convinced to avoid all the non-vegetarian items except goat's flesh. Avoidence of the following food items were also strictly advised.

| | | |
|--------------------|---|--------------------------------|
| • Agathi Keerai | - | Leaves of sesbania grandiflora |
| • Seeni avaraikai | - | Cynampsis psoratoides |
| • Pagarkai | - | Bitter guard |
| • Poosanikai | - | Great pumpkin |
| • Perum payaru | - | Cow – gram |
| • Solam | - | Maize |
| • Kanam | - | Horsegram |
| • Motchai | - | Flac bean |
| • Elumichan pazham | - | Lemon (citrus medica) |

B. MODERN ASPECT

SKIN ANATOMY

The skin is a large organ of the human body. Forming a major interface between man and his environment. It covers an area of approximately 2m^2 and weighs about 4kg. The structure of human skin is complex consisting of a number of layers and tissue components.

The superficial epithelial layer – EPIDERMIS

Underlying connective tissue layer – DERMIS or CORIUM

Subcutaneous layer – HYPODERMIS

Epidermis

The epidermis is formed of non vascular stratified epithelium. Its usual thickness is between 0.07mm and 0.12mm. It is divisible into two main systems,

1. Keratinising or malphigian systems which forms the bulk.
2. Pigmentary system produces pigment.

Epidermis composed of the following layers from base to the surface.

1. Stratum Germinatum (Basal cell layer)

This is the deepest portion of the epidermis and consists of a single layer of keratinocytes.

2. Stratum malphigii (Prickle cell layer)

This layer is composed of several layers of polygonal prickle cells, which possess tonofilament contain PAS positive material that is precursor of keratin.

3. Stratum Granulosum (Granular cell layer)

This layer consists of 1 to 3 layers of flat cells containing keratohyaline basophilic granules which are PAS negative.

4. Stratum lucidum

It is a pale wavy looking layer, formed by many layers of flattened and closely packed cells devoid of nuclei.

5. Stratum corneum (Horny layer)

Most superficial layer, consists of many layers of non-nucleated flattened cornfield cells.

Dendritic cells of epidermis

These are melanocytes, langerhans cells and indeterminate cells.

Basement Membrane

The junction of the epidermis and dermis is formed by basement membrane. It allows movement of cells and nutrients between the dermis and epidermis.

Dermis

The dermis consist of 2 parts,

1. Superficial papillary dermis
2. Deeper reticular dermis

The dermis is composed of fibro collagenic tissue containing blood vessels, lymphatics and nerves. Besides these structures, dermis contain appendages or adnexal structure

DERMAL APPENDAGES

1. Sweat glands

These are of 2 types:

Eccrine and Apocrine.

Eccrine glands

They are coiled tubular glands distributed all over the skin except on the beds of nails, margins of lips and the glans penis. But are most numerous in the palms, soles and axillae.

Apocrine glands

They are tubular glands with large lamina. They occur in the axillae, areola and nipples of breasts, umbilicus, the anus and the genitalia. Their secretion is odoriferous with a secondary sexual significance.

2. Sebaceous glands

They are scattered all over the integument except palms and soles. Meibomian gland, mammary glands and smegma glands of the penis are modified sebaceous glands.

3. Hair

Hair is found on every part of the body except on the palms and the soles, the dorsal surface of the terminal phalanges, lips, inner surface of the labia, inner surface of the prepuce and the glans penis.

A hair is composed of a root, the part embedded in the skin and a shaft the portion projecting from the surface. Hairs differ in length, thickness and colour in different parts of the body and in different races.

4. Nails

The nails are thickness of the deeper part of the stratum corneum. The nail is composed of keratinised clear horny cells.

Blood vessels:

The blood supply of the skin originates from a large number of anastomoses forming anastomosis in the deepest part of the cortex. From here single vessels run upwards and from a second network in the upper cortex. Finally terminal arterioles ending in capillary loops, which drain into connecting venules. The blood is returned to the large veins in the subcutaneous tissue.

Lymphatics:

The skin contains a rich network of lymphatics, which drain into a few large vessels in the hypodermis.

Nerve Supply:

The nerve supply of the skin consists of a motor sympathetic portion derived from the sympathetic ganglia and sensory spinal portion arising from the dorsal root ganglia. The sympathetic fibers innervate the blood vessels, erector pilorum muscles and apocrine duct.

Physiological Functions of the Skin

| Function | Structure/cell involved |
|---|---|
| Protection against: Chemicals, particles Ultraviolet radiation Antigens, haptens Microbes | Horny layer Melanocytes Langerhan cells, lymphocytes, Mononuclear phagocytes, mast cells |
| Preservation of a balanced internal environment Prevents loss of water, electrolytes and macromolecules | Horny layer |
| Shock absorber Strong, yet elastic and compliant covering | Dermis and subcutaneous fat |

| | |
|---|--|
| Sensation | Specialist nerve endings |
| Calorie reserve | Subcutaneous fat |
| Vitamin D synthesis | Keratinocytes |
| Temperature regulation | Blood vessels, eccrine sweat glands |
| Lubrication and waterproofing | Stratum corneum |
| Protection and praising | Nails |
| Hormonal Testosterone synthesis from inactive precursors and testosterone conversion to other androgenic steroids | Hair follicles Sebaceous glands |
| Body odour (more important in animals) | Apocrine sweat glands |
| Psychosocial | Hair, nails, appearance and tactile quality of skin. |

PSORIASIS

Definition

Psoriasis is a common, genetically determined, inflammatory skin disorder of unknown cause which in its most usual form is characterized by well-demarcated raised red scaling patches that preferentially localize to the extensor surfaces.

PSORIASIS the word comes from ancient Greece and means “to itch”. Red eruptions appear on the surface of the skin and begin to itch. These areas form plaques over the reddened lesions. The plaques resemble multilayered scales of skin. Psoriasis varies in intensity from a few random spots to a massive out break covering the entire body and requiring hospitalization. Psoriasis has a tendency to be genetically inherited.

Recently it has been classified as being an auto immune disorder (the body’s immune system turning on itself). This disorder can originate in juveniles or not be evident until adulthood, it has been reported to initiate as early as birth or not occur until very late in life. Once Psoriasis begins there are only remissions and relapses of varying degrees of intensity.

Historical Aspects of Psoriasis

The earliest descriptions of what appears to represent Psoriasis are given at the beginning of medicine in the Corpus Hippocraticum. This work was edited in Alexandria 100 years after the death of Hippocrates (460 -377 B.C). Hippocrates used the terms Psora and Lepra for conditions that can be recognized as Psoriasis. Later Celsus (25 B.C) who translated the writings of Tiberius Claudius Menekrates (the personal physician of Emperor Tibericus) in the Greek, described among 40 different dermatoses a form of impetigo that was interpreted by R.William (1757-1812) as being Psoriasis. William separated two diseases as Psoriasiform entities, a discoid lepra Graeconum and a polycyclic confluent Psora leprosa which later was called Psoriasis. In 1841 dermatologist Ferdinand Non Hebra (1816-1880) unequivocally showed that William's lepra Graeconum and Psora leprosa were one disease that had caused much confusion because of differences in the size distribution growth and involution of lesions.

Aetiology :

Exact cause of Psoriasis is unknown. Hypothesis of aetiology.

- Hyperplastic epidermis
- Immunological defects
- Biochemical abnormalities

- Increased epidermal proliferation / inflammatory component
- Alteration in skin content.
- Infection (retro viruses)

Psoriasis a disease with Genetic Predisposition

Numerous studies over many years support the finding that genetic predisposition, an inherited tendency to develop the disease which has a major role in the pathogenesis of Psoriasis. Genetic predisposition does not mean a 100 percent guarantee that the disease will appear; other initiating factors such as injury or infection may act together with the disease process. Supporting evidence for genetic predisposition includes,

- 1 There is a higher-than-average incidence of Psoriasis in relatives of people with Psoriasis, indicating “familial tendency” to develop the disease; however in some people with Psoriasis no family history is evident.
- 2 There is an increased incidence of Psoriasis in children when one or both parents have Psoriasis.
- 3 In studies of identical and non-identical twins, Psoriasis is much more likely to appear in both identical twins than in both non-identical twins a finding that also confirms that more than one gene must be inherited to establish genetic predisposition for Psoriasis.

- 4 There is higher than expected frequency of certain white cell antigens (class I human Leucocyte Antigens or HLA' S) on cells of people with Psoriasis and their close relatives; this finding also supports Psoriasis inheritability and also suggests that the gene(s) involved in Psoriasis may be some chromosome that holds the genes for HLA. There are many types of HLA in the HLA complex and studies have shown that HLA type may be associated in some degree with timing of disease onset, type of Psoriasis and severity of disease.

Psoriasis Triggers:

A trigger is usually needed to make Psoriasis appear whether it is for the first time or the thirtieth.

Common Psoriasis Triggers are:

(a) Infection:

- Candida albicans (thrush)
- Human Immuno deficiency virus (HIV)
- Staphylococcal skin infections (boils)
- Streptococcal pharyngitis (strep throat)
- Viral upper respiratory condition

(b) Reaction to certain medications:

- Anti-malarial drugs.
- Beta-Blockers (used to treat high blood pressure)
- Cortico steroids(to treat Psoriasis – overuse/with drawal)
- Indomethacin (NSAID – to treat arthritis)
- Lithium (to treat manic depression / other psychiatric conditions).

(c) Skin injury:

People with psoriasis often notice new lesions 10 to 14 days after the skin is cut, scratched , rubbed, or severely sun burned. This is called “**KOEBNER'S PHENOMENON**” and is named after Dr. Koebner who in the 19th century observed that a patient developed new lesions in areas where his horse bit him.

A wide range of **traumas** and **skin conditions** are known to trigger “**KOEBNER’S PHENOMENON**”:

Skin trauma:

- Acupuncture
- Bites
- Bruises
- Burns
- Chafing
- Chemical irritation

- Cuts and scrapes
- Pressure against skin
- Shaving
- Sunburn and peeling
- Adhesive tape on the skin
- Tattoos
- Vaccinations
- Others

Skin conditions:

- Boils
- Dermatitis
- Herpes blisters
- Lichen planus
- Scabies
- Vitiligo
- Others

(d) Stress:

- Isolated from the society because of skin changes
- Difficulty in activities of daily living because of Psoriasis
- Time-consuming treatment
- Spending money for treatment
- Ineffective treatment
- Stressful event (etc).

(e) Weather:

- Cold winter – trigger psoriasis
- Hot / sunny – help clear psoriasis
- Air conditioning – trigger psoriasis

(f) other triggers:

- Hormones
- Smoking
- Heavy drinking

Pathogenesis

Accelerated epidermopoiesis has been considered to be the fundamental pathological event in Psoriasis. The transit rate of Psoriatic keratinocyte is increased and the deoxyribo nucleic acid synthesis time is decreased. It has been suggested that it is the heightened proportion of epidermal cells participating in the proliferative process rather than the actual rate of epidermopoiesis, that is the basic fault in Psoriatic lesions. The result in either case is greatly increased production of keratin.

The earliest histologic change was a inflammatory perivascular upper dermal infiltrate, with only epidermal acanthosis and parakeratosis after the transformation of the lesion into a scaly papule.

Polyamines are significantly increased in Psoriatic lesions. There is an increased production of the leucotrienes and 12-hydroxy eicosatetraenoic acid, both of which are chemotactic for polymorphonuclear leukocytes.

The Arachidonic acid cascade

The complexity of the pattern of inducers of inflammation is nowhere better shown than in the production of leucotrienes, prostaglandins and eicosatetraenoic acid from arachidonic acid. Arachidonic acid is obtained from dietary sources, membranes of red meat, green leafy vegetables, corn and safflower oil. Its products are central to the aggravation of Psoriasis by trauma and to the pathogenesis of Psoriatic lesions.

Psoriasis is associated with different HLA antigens. They are B13 or B17 has a five fold risk of developing Psoriasis. In Pustular Psoriasis HLA- B27 may be seen whereas B13 and B17 are increased in Guttate and Erythrodermic Psoriasis. In palmoplantar Psoriasis, there is an increased proportion of persons having HLA- B8, Bw 35. - Cw7, and -DR3.

Farber affirms an abnormal nucleoprotein metabolism in the incomplete keratinization process in Psoriasis. In the stratum corneum the free amino acids are low, with an accumulation of MPS and of free and esterified choline. DNA and RNA accumulate and pentose, purines, uracil and organic phosphates are also increased.

There is prominent neutrophil response in psoriatic lesions. How this relates to findings of increased plasminogen activator activity in psoriatic skin or to the enhanced physiologic functions. Both Psoriasis and Reiter's disease occur with increased frequency in patients with AIDS. Also interleukin-2 therapy for malignancy may induce Psoriasis.

(Reference - Text book of Dermatology-fitz patrick)

Weddell showed that there is a profuse hyperplasia of nerve endings beneath and into the lesions of Psoriasis.

Histopathology:

The histopathology appearance of Psoriasis is distinctive but not specific. Main feature may be subdivided into

- Epidermal thickening
- The inflammatory component
- The vascular component

a) Epidermal Thickening:

- Epidermis shows marked exaggeration of the rete pattern.
- Elongation of epidermal down growths with bulbous club-like enlargement of their ends.
- Many mitotic figures can be seen
- Rate of epidermal cell production increased.
- The turn-over time of psoriatic epidermis and stratum corneum is very much shortened than normal epidermis.

b) The inflammatory component:

- Desiccated polymorpho nuclear leukocytes – Munro microabscesses.
- Epidermis is oedematous/infiltrated by inflammatory cells.
- Dermis also contains many inflammatory cells mostly lymphocytes.
- Leukotriene B4 – seen in psoriatic stratum corneum.

c) The vascular component:

- Papillary capillaries are dilated and tortuous
- Larger gaps between the endothelial cells
- Abnormal capillaries.

Cell Systems involved in Pathogenesis of Psoriasis**Keratinocytes**

A characteristic feature of involved skin of Psoriatic subjects is hyper proliferation. There is two fold increase in proliferative cell population and 100 percent of the germinative cells of the epidermis appear to enter the growth fraction compared with 60 to 70 percent for normal subjects.

T cells

Numerous T cells are present in psoriatic lesions predominantly surrounding the vessels of the upper dermal plexus.

Granulocytes

Formation of spongiform microabscesses (Munromicro abscesses) filled with granulocyte is a hallmark of Psoriasis. The presence of these cells in psoriatic lesions variable and becomes more pronounced with disease activity (eg) in acute or pustular Psoriasis.

Endothelial cells

Changes in the dermal capillary endothelium have been implicated at the site of primary defect. Hyper proliferation of endothelial cells is most pronounced in the tortuous dilated capillaries at the advancing edges of a lesion.

Mast cells

Mast cell densities are increased in lesional psoriatic skin compared with normal or uninvolved psoriatic skin.

Fibroblasts

Fibroblasts are potent producers of cytokines and lipid mediators that could affect the epidermis as well as the inflammatory reaction.

CLINICAL FEATURES

The lesions

- Well demarcated margin and is raised above the skin surface (plaque)
- Plaques vary enormously in size and shape
- They often start out discoid but end up polycyclic

Sites Affected

- Extensor aspects of trunk and limbs preferentially. Sometimes flexor aspects also affected.
- Knees, elbows, scalp are frequently affected.
- Nails are often affected and may show – “thimble pitting”, separation of the nail plate from the nail bed (anonycholysis) subungual debris, brownish – black discolourations and deformities of the nail plate.
- Major body folds in elderly who are over weight (flexor aspects)
- Groins, genitalia, axillae
- Inframammary folds in women.
- Skin of abdominal folds/ umbilicus.
- Scalp margin, paranasal folds, retro auricular folds.

CLINICAL VARIANTS OF PSORIASIS

Guttate Psoriasis

- Guttate Psoriasis, named for its droplet –shaped lesions.
- More Common in children and young adults.
- Guttate lesions range in diameter from 0.1cm to 1 c.m
- They are predominate on the trunk and proximal areas of the extremities and are more likely to involve the face.
- Often it develops some two or four weeks after an episode of tonsillitis or pharyngitis, mostly due to beta-haemolytic streptococci.
- Represent acute flare of pre-existing chronic plaque type Psoriasis.

Plaque – type Psoriasis (Psoriasis vulgaris)

- Occuring in 75% to 80% of all psoriasis patients.
- Lesion is well demarcated, red – violet round or oval plaque.
- Lesion is 1c.m or larger in diameter and surrounded by white silvery scales, which overlie bony prominences.
- In darkly pigmented patients, lesions are hyperpigmented with various shades of brown or black, which are accentuated by chronic rubbing or scratching.
- Symmetry of distribution of skin lesions is the rule in plaque type psoriasis.

- Face is frequently spared. Most commonly involved areas are elbows, knees, scalp, sacrum, umbilicus, intergluteal cleft and genitalia.
- 70% of patients complain of pruritis, skin pain, or burning, especially when the scalp is involved.

PUSTULAR PSORIASIS.

It is characterized by sterile pustules either generalized or localized to palms and soles.

(a) Localized Pustular Psoriasis (Palmoplantar Pustulosis)

- Yellowish white, sterile pustules on the central parts of the palm and soles.
- Older lesions take on a brownish appearance and later are shed in a scale at the surface
- Lesions are observed in all stages of development, including vesicles, vesicopustules, frank pustules and dried brown maculopapules
- The disorder is resistant to treatment and is subject to relapses and remission over many years

(b) Generalized pustular psoriasis (Von Zumbusch)

- Characterized by fiery – red, irregular patches with round, arcuate, serpiginous borders that are studded with myriad 1m.m to 2 m.m superficial pustules.
- Severe systemic upset, a swinging pyrexia, arthralgia and a high polymorpho nuclear leuco cytosis, hypocalcaemia, hypoalbuminaemia accompanying the skin disorder.
- The skin patches have a predilection for flexural or skin – fold areas such as armpits, groin, or under breasts but may occur anywhere.
- The tiny pustules coalesce into lakes of pus, desquamate, and form new pustules as the borders moves in waves every 24 to 72 hours.

(C) Other rare variants of pustular psoriasis

1. Acrodermatitis Continua (Dermatitis repens)

Recalcitrant pustular erosive disorder on the fingers and toes around the nails and occasionally elsewhere

2. Pustular bacteriod

Sterile pustules suddenly appear on the palms and soles after an infection.

3. Subcorneal pustular dermatosis

There is generalized eruption of sterile superficial pustules.

ERYTHRODERMIC PSORIASIS

Plaque type Psoriasis progress to erythrodermic Psoriasis in which the plaque – like appearance disappears and the skin is universally red and scaly.

- Concomitant Psoriatic arthropathy is common
- Heat loss (because of increased blood supply to skin)
- Water loss leads to dehydration because of the disturbed barrier function of the abnormal stratum corneum.
- Hyperdynamic circulation
- Risk of high cardiac output failure
- Loss of protein, electrolytes, metabolites via the shed scale and exudates and may develop deficiency states
- Depressed because of malaise, pruritis and discomfort

NAPKIN PSORIASIS

Infantile napkin dermatitis some times takes on Psoriatic lesions develop on the scalp and trunk.

NAIL PSORIASIS

- Finger nails are affected more than toe nails
- Pitting of nail plate. The pits tend to be large, deep and randomly dispersed on the nail plate.
- Small red spots in the lanula or yellow-brown spots (“oil droplet sign”) in the nailbed correspond to early guttate lesions of Psoriasis.
- The distal nail plate may separate from the nail bed (onycholysis)
- Chronic inflammation of the nail matrix may lead to scarring and permanent dystrophy, mimicking onychomycosis, especially when toe nails are affected.

Terms describing Morphologic features of Psoriasis

Psoriasis ostracea

Old patches may be thickened and tough and covered with lamellar scales like outside of an oyster shell.

Psoriasis guttata

The lesions are the size of water drops.

Psoriasis follicularis

Tiny scaly lesions are located at the orifices of the pilosebaceous follicles.

Psoriasis figurate, Psoriasis annulata & psoriasis gyrate

The lesions have curved linear patterns produced by central involution.

Psoriasis discoides

In this type central involution does not occur and solid patches persist.

Psoriasis rupioides

In this type crustaceous lesions occur resembling syphilitic rupia.

Psoriasis flexura

Better known as inverse Psoriasis and is found in intertriginous area.

Volar Psoriasis

On palms and soles.

Systemic Association of Psoriasis

Inflammatory Bowel Disease

The strong linkage of HLA-B 27 to ankylosing spondylitis and ulcerative colitis and the increased frequency of this haplotype in patients with psoriasis and arthritis (about six times normal) suggest that ulcerative colitis should be seen more frequently in patients with psoriasis. The frequency of psoriasis among patients with ulcerative colitis and crohn's disease is respectively, 3.8 and 7.6 times normal.

Occlusive Vascular Disease

Investigators to propose an association between Psoriasis and large vessel disease. Current evidence suggests that patients with Psoriasis especially males have an increased incidence of occlusive vascular disease (Thrombophlebitis, Myocardial infarction, pulmonary and cerebral vascular accidents).

Systemic effects of Psoriasis

Generalized pustular Psoriasis described by Von Zumbusch, is the form associated with systemic findings. This form of Psoriasis appears as waves of sterile pustules on an erythematous skin, characteristically short episodes of fever 39⁰ to 40⁰C followed by another wave of new pustules. In addition to fever there are systemic signs of disease such as weight loss, muscle weakness, leucocytosis, hypocalcemia and an increased sedimentation rate. In patients with pustular Psoriasis, arthropathy is common as it the HLA – B27-haplotype.

Studies of approximately 500 patients suggest that patients with Psoriasis have a normal risk of systemic cancer and possibly increased risk of cutaneous cancer.

Dignosis of Psoriasis Is Based Upon

- Family History of Psoriasis
- Typical distribution of the lesion on scalp, elbows, knees, front of legs and nails
- Well defined non - indurated, dry erythematous areas with silvery layer
- The candle - grease sign
- Auspitz sign
- Koebner's phenomenon
- Little or no itching

Severity of psoriasis

- Extensive plaque type psoriasis involving 20% or more of the body surface area (BSA)
- Psoriatic erythroderma
- Generalized pustular psoriasis

A broader definition of severe disease include

- Disabling plaque type Psoriasis involving the face, genitalia, hands and feet
- Psoriasis complicated by medication, such as rotational therapy or by a need for medication withdrawal, such as that caused by flare due to systemic corticosteroids.
- Disabling psoriatic arthritis with skin disease of any extent.

COMPLICATIONS OF PSORIASIS

Complications are infrequent

- Psoriatic arthritis can cause disability
- Exfoliative dermatitis
- Eczematous lesion caused by scratching and infection
- Lichenification brought by scratching

PROGNOSIS

Psoriasis can be controlled satisfactorily. General health and longevity are unaffected. The clinical course of the lesion is chronic with various periods of remissions (weeks to years). The whole position should be explained to the patient. He should be encouraged for persisting towards the treatment until the lesions have disappeared. Psoriasis does not leave scars. The nail gradually assumes the normal appearance. The palmar and nail psoriasis are more resistant to the treatment.

Common Laboratory Abnormalities in Psoriasis

- Elevated Uric acid
- Mild anemia
- Negative nitrogen balance
- Increased sedimentation rate
- Increased- α 2 Macro globulin
- Increased IgA levels and increased quantities of immune complexes.

Serum Uric acid

Serum uric acid is elevated in 30-50 percent of patients with Psoriasis. This is thought to be caused by the increased epidermal proliferation seen in Psoriasis and it is associated with break down of DNA. Elevated Uric acid levels increase the risk of gouty arthritis and there are reported cases of typical gouty arthritis with Psoriasis.

Haematologic findings

Folate metabolism

It is not uncommon for patients with Psoriasis to present with mild anemia. Although the anemia is usually categorized as anemia of chronic disease, there is evidence of folate and iron abnormalities.

Iron metabolism

Iron content in normal stratum corneum is $26 \mu\text{g/g}$ and the normal loss of stratum corneum per day approaches 1g . In Psoriasis the iron loss approach 50 gms . The mean iron content of the shed stratum corneum of involved sites in patient's with Psoriasis is two times normal. These calculations suggest that up to 2.5 mg of iron can be lost per day via desquamation.

Protein loss

Negative nitrogen balance, defined as protein loss exceeding nutritional requirements, may be reflected in serum albumin levels. Although the pathologic significance is unknown, hypoalbuminemia has been noted in patients with severe psoriasis.

Serum proteins

Patients with Psoriasis have increased levels of C- reactive protein and $\alpha 2$ macro globulin and generally their sedimentation rates are elevated. Recently it has been observed that serum IgA levels and IgA immune complexes are elevated in patients with Psoriasis.

DIFFERENTIAL DIAGNOSIS

Psoriasis must be differentiated from Seborrheic dermatitis, Pityriasis rosea, Lichen planus, Eczema, Psoriasiform syphilis, and Lupus erythematoses.

SEBORRHEIC DERMATITIS

In Psoriasis lesions are on the extensor surfaces, especially of elbows, knees and on the scalp, whereas in seborrheic dermatitis, scalp is involved there is a predilection for the eyebrows, nasolabial angle, the ears, the sternal region and the flexures. The scales in Psoriasis are dry, silvery and shiny, whereas those in seborrheic

dermatitis are greasy and lusterless. On removal of the scales in Psoriasis there is a oozing of blood from the capillaries (Auspitz sign) whereas this does not occur in seborrheic dermatitis.

PITYRIASIS ROSEA

In pityriasis rosea, the eruption is located on the upper arms, trunk and thighs and the duration is a matter of weeks. There are oval, rose coloured patches that centrally show a crinkling of the epidermis and on almost perceptible scaling, often of colarette type. The onset with the herald patch and the tendency of the subsequent lesions to arrange themselves so that their long diameters are parallel to the direction of the rib, helps to distinguish between pityriasis rosea and psoriasis.

LICHEN PLANUS

Lichen planus affects chiefly the flexor surfaces of the forearms and wrists and the shins and ankles. The patches are pruritic and thickened. Often the violaceous colour is pronounced, but at other times the patches are a dirty brown colour, only distinguished from psoriasis by close examination, which reveals that the scaling is not at all micaceous, but scanty and tightly adherent at the edge of the patch. The scalp is much less frequently involved, and the nails are not pitted as in psoriasis, but longitudinally ridged and thickened with pterygium a characteristic finding.

ATOPIC DERMATITIS

In atopic dermatitis the distribution is usually not on the extensor surfaces of elbows and knees and exudation and a slight greyish scaling, accompanied by severe itching are present.

PSORIASIFORM SYPHILIS

The psoriasiform syphilis, has infiltrated patches of copper coloured papules, often arranged in a configurate manner. The scales are brownish and sparse. Serologic tests for syphilis are positive; a general adenopathy and often mucuous patches, condylomas and other symptoms of late secondary syphilis are present. Itching is usually absent.

LUPUS ERYTHEMATOSUS

In lupus erythematosus, the lesions are discrete plaques, usually on the face, scalp associated with atrophy, scaling and alopecia. Rarely face is affected in psoriasis. The scales of lupus erythematosus are greyish and adherent. Removal of the scale the undersurface is seen to be papillous due to the projecting follicular plugs. There is a psoriasiform subset of subacute cutaneous lupus erythematosus that may be distinguished by its location on the upper trunk, arms, legs, face and by other signs of Lupus erythematosus such as photosensitivity.

PSORIATIC ARTHRITIS (Arthropathic psoriasis)

Psoriatic arthritis is a destructive arthropathy and enthesopathy (tendinitis, dactylitis and fascitis) with some clinical features in common with rheumatoid arthritis. It is an autoimmune disease.

Symptoms of Psoriatic arthritis

- Symmetrical involvement of the small joints of hands, feet, wrists, ankles in patients with psoriasis.
- No obvious skin findings.
- Minimal scaly red skin on the scalp, in the belly button, or between the buttocks.
- Nail abnormalities.
- Conjunctivitis
- Iritis
- Inflammation of muscles and tendons, especially in heel, sole of foot.

Patterns of Psoriatic arthritis

(a) Asymmetrical Oligoarticular arthritis

- Arthritis that involves a few joints but not necessarily the same joints on both sides of the body or other similar joints on the same side of the body.
- Usually, fingers and toes are affected, first fingers have a "Sausage" appearance (Called dactylitis).
- Usually, fewer than 5 joints are affected at any particular time.

(b) **Symmetrical Polyarthritis**

- Arthritis that involves the same joints on both sides of the body.
- Hands, wrists, ankles and feet may be involved.

(c) **Distal interphalangeal arthropathy**

Arthritis in the joints at the ends of the fingers and toes.

(d) **Arthritis mutilans**

A long term psoriatic arthritis in which the joints are severely damaged and deformities can be seen/ especially in the hands and feet.

(e) **Spondylitis**

Inflammation of the vertebrae in the spine with or without inflammation of the sacroiliac joint and inflammation of the hip.

(f) **Juvenile psoriatic arthritis**

This often occurs in 9 to 10 year old girls.

C. DRUG

படைக்கு தூரணம்

1. ஆகாச கருடன் வேர் கிழங்கு
2. சிவனார்வேம்பு சமூலம்

1. Akasha garudan (Corallocarpus epigaeus)

| | | |
|------------------|---|--|
| Other Tamil Name | : | Kollan Kovai, Karudan Paei Seenthil |
| English Name | : | Bryoms |
| Sanskrit Name | : | Mahamulam Nabho – garuda – kanda |
| Hindi | : | Akas – gaddah Rakas – gaddah |
| Malayalam | : | Kollan – kova – kizhana. |

Botaninal aspect :

| | | |
|-----------|---|----------------|
| Kingdom | : | Plant kingdom |
| Class | : | Dicotyledons |
| Sub Class | : | Polypetalae |
| Series | : | Calyciflorae |
| Order | : | Passi florales |
| Family | : | Cucurbitaceae |
| Genera | : | Corallocapus |
| Species | : | Epigaeus. |

Chemical Constituent :

“Bryonin” present, which is bitter in taste.

Root tubers :

Yellowish white, marked externally with circular rings. It is bitter in taste.

| | | |
|--------|---|----------|
| சுவை | : | கைப்பு, |
| தன்மை | : | வெப்பம் |
| பிரிவு | : | கார்ப்பு |

பொது குணம்

1. சூலையாண் டுதைதிரி தோடமக்கி வெப்புகண்ட
மாலை குடலின்வலி மாகுட்டம் - ஆலவிடம்
உட்கரப்பான் மெய்யரிப்பும் உண்டோகொல் லங்கோவை
கைகு ளிருக்கவின்று ங்காண். - (அ.கு)
2. துட்டவிடம் பாண்டு வெப்பு சூலைவா தங்கிரந்தி
குட்டம் அரிப்பக்கி கோண்குடல்நோய் - கெட்டகண்ட
மாலைபோம் கொல்லன்கோ வைக்கிழங்கால் முத்தோட
வேலைபோம் பாரில் விளம்பு - (அ.கு)

குணம்

இது, கொடிய நஞ்சு, பாண்டு, உட்சூடு, சூலை, கிரந்தி, பெருநோய் (மாகுஷ்டம்), கரப்பான், நமைச்சல், அக்கிப்புண், குடல்நோய், கழுத்துக்கழலை, முக்குற்றக்கேடு ஆகிய இவைகளைப் போக்கும்.

2. Sivanar Vembu (Indigofera Aspalathoides)

| | | |
|------------------|---|-----------------|
| Other Tamil Name | : | Kanthari |
| Malayalam | : | Manaveli |
| Kanadam | : | Shivamalli-gida |

Botanical aspect :

| | | |
|------------|---|---------------|
| Kingdom | : | Plant kingdom |
| Class | : | Dicotyledons |
| Sub Class | : | Polypetalae |
| Series | : | Calyciflorae |
| Order | : | Rosales |
| Family | : | Leguminosae |
| Sub Family | : | Fabaceae |
| Genera | : | Indigofera |
| Species | : | aspalathoides |

Chemical Constituent :

Aromatic oil present in the root.

Root

Demulcent.

| | | |
|--------|---|----------|
| சுவை | : | கைப்பு, |
| தன்மை | : | வெப்பம் |
| பிரிவு | : | கார்ப்பு |

பொது குணம்

1. குட்டஞ் சிரங்கு குறைப்புப் பிசமாந்தை
கட்டப் பிணிகள் கழலுமே - திட்டம்
உரளிம்பங் காயத்துக் குண்டாகு மேலை
அரளிம்ப மென்னுமருந் தால். - தேரன் வெண்பா
2. சாய்க்குமிபெ புண்பழம்புண் சர்மகுட டம்பிளவை
தீக்கடுகால் வன்பெருநோய் சிந்துமா - நோய்க்கு
விதையாதி வேம்பினா மெய்க்கழகு காலை
உதையாதி வேம்பினா லுன். - அகத் - குணவாகடம்

குணம்

இதனால், தோலைப் பற்றி வரும் படைகள், நாட்பட்ட புண், சொறி, சிரங்கு, பிளவை, கொடுமை செய்யக் கூடிய வளிநோய்கள், குறைநோய் மந்தம், பாம்பு நஞ்சு நீங்கும். அழகுண்டாகும்.

II. Veppampattai Thylam

Veppampattai,

Nannari Verpattai

Sivappu Manjisti pattai

Elarisi

Coconut Oil

1. Veppampattai

| | | |
|------------------|---|---------------------------|
| Other Tamil Name | : | Arittam, Nimbam, Vathari, |
| English Name | : | Margosa, Neem |
| Telugu | : | Vepa |
| Sanskrit Name | : | Nimba |
| Hindi | : | Nim |
| Malayalam | : | Veppa |
| Kanadam | : | Bevina |

Botanical aspect :

| | | |
|-----------|---|---------------|
| Kingdom | : | Plant kingdom |
| Class | : | Dicotyledons |
| Sub Class | : | Polypetalae |
| Series | : | Disciflorae |
| Order | : | Geraniales |
| Family | : | Meliaceae |
| Genera | : | Azadirachta |
| Species | : | indica |

Chemical Constituent :

Azadirachtin is present.

| | | |
|--------|---|------------------------|
| சுவை | : | கைப்பு, சிறு துவர்ப்பு |
| தன்மை | : | வெப்பம் |
| பிரிவு | : | கார்ப்பு |

பொது குணம்

1. ஓதரிய வேம்பை யுறைக்கிற் சுரமுடனே
வாதமறு மூலகண மாந்தம் போந்தீதாய்
உதிருமெரி பூச்சிகுன்ம மோதா தொழியுஞ்
சிதறுமலம் போகுமெனத் தேர்.

குணம்

இது ஐயசுர முதலிய சுரங்கள், சுரத்தாலுண்டாகும் உடல் தளர்ச்சி, மூலகணம், மாந்தம், மலம், வளிப்பெருக்கு, குன்மம், (வயிற்றுவலி), எரிபூச்சி இவைகளைப் போக்கும். 100 ஆண்டு வேப்பம்பட்டை பெருநோய், செங்கரப்பான், புண் புரை, சொறி சிரங்கு இவற்றை தீர்க்கும்.

2. Nannariverpattai

| | | |
|------------------|---|---|
| Other Tamil Name | : | Angarimooli, Pathalamooli, Krishna valli |
| English Name | : | Indian sarasapailla |
| Telungu | : | Suganthi |
| Sanskrit Name | : | Sariba |
| Hindi | : | Magram |
| Malayalam | : | Nannari |
| Kanadam | : | Sugandha-palada |

Botanical aspect :

| | | |
|-----------|---|----------------|
| Kingdom | : | Plant kingdom |
| Class | : | Dicotyledons |
| Sub Class | : | Gamopetalae |
| Series | : | Heteromerae |
| Order | : | Ebenales |
| Family | : | Asclepiadaceae |
| Genera | : | Hemidesmus |
| Species | : | indicus |

Active principles:

It contains essential oil – 2hydroxy – 4 methoxy benzaldehyde, sitosterol, stigmasterol, sarsapic acid, ketone, fatty acids, saponin, tannin, resin acids. It is employed in nutritional disorders, syphilis, urinary diseases and skin diseases.

- The wealth of India.

Organoleptic characters

| | | |
|--------|---|------------------|
| சுவை | : | இனிப்பு, கைப்பு, |
| தன்மை | : | தட்பம் |
| பிரிவு | : | இனிப்பு |

Actions:

Alterative
Tonic
Demulcent
Diuretic
Diaphoretic

குணம்

அழல் நோய், வண்டு கடி, கிரந்தி தீரும்.

3. Manjisti (Rubia cordifolia.Linn)

| | | |
|------------------|---|----------------------------|
| Other Tamil Name | : | Pandi, Manjoogam, Manjitti |
| English Name | : | Indian Madder |
| Telugu | : | Manjishta |
| Sanskrit Name | : | Manjisthta |
| Hindi | : | Manjitti, Manjitha |
| Malayalam | : | Manchitti |
| Kan. | : | Manjisthta |

Botaninal aspect :

| | | |
|-----------|---|---------------|
| Kingdom | : | Plant kingdom |
| Class | : | Dicotyledons |
| Sub Class | : | Gamopetalae |
| Series | : | Inferae |

| | | |
|---------|---|------------|
| Order | : | Rubiales |
| Family | : | Rubiaceae |
| Genera | : | Rubia |
| Species | : | Cordifolia |

Chemical Constituent :

Glocoside – munjistin. Turkey dye present in the root.

| | | |
|--------|---|-------------------|
| சுவை | : | கார்ப்பு, கைப்பு, |
| தன்மை | : | வெப்பம் |
| பிரிவு | : | கார்ப்பு |

குணம்

இது நிறத்திற்காக தைலங்களில் சேர்க்கப்படுகிறது.

4. Elarisi (Elettaria cardamomum)

| | | |
|------------------|---|------------------------|
| Other Tamil Name | : | Aanji, korangam, thudi |
| English Name | : | Cardamom Seeds |
| Telugu | : | Elakulu |
| Sanskrit Name | : | Ela |
| Hindi | : | Elachi |
| Malayalam | : | Elattari |
| Kanadam | : | Elakki |

Botanical aspect :

| | | |
|---------|---|----------------|
| Kingdom | : | Plant kingdom |
| Class | : | monocotyledons |
| Series | : | Epigynae |
| Family | : | Zingiberaceae |
| Genera | : | Elettaria |
| Species | : | cardamomum |

Chemical Constituent :

Terpenoids – Cineol, Limonene

| | | |
|--------|---|----------|
| சுவை | : | கார்ப்பு |
| தன்மை | : | வெப்பம் |
| பிரிவு | : | கார்ப்பு |

குணம்

இது வாசனைக்காக தைலங்களில் சேர்க்கப்படுகிறது. உடல் வெப்ப, குறுவியர்வை, சுரம், நஞ்சு தீரும். உடல் குளிர்ச்சி அடையும்.

5. Coconut Oil

| | | |
|------------------|---|-----------------------|
| Other Tamil Name | : | Mukkannan, Mudiakaran |
| English Name | : | Coconut |
| Telugu | : | Tenkayi |

| | | |
|---------------|---|----------|
| Sanskrit Name | : | Narikela |
| Hindi | : | Nariyal |
| Malayalam | : | Thenna |
| Kanadam | : | Tengina |

Botanical aspect :

| | | |
|---------|---|----------------|
| Kingdom | : | Plant kingdom |
| Class | : | monocotyledons |
| Series | : | Calycinae |
| Family | : | Arecaceae |
| Genera | : | Cocos |
| Species | : | nucifera |

Chemical Constituent :

Lauric acid, myristic acid present in the Oil.

| | | |
|--------|---|----------|
| சுவை | : | இனிப்பு, |
| தன்மை | : | தட்பம் |
| பிரிவு | : | இனிப்பு |

குணம்

புண்களுக்கு காய்ச்சும் எண்ணெய்களில் இரு சிறப்பாக சேரும். சில குளிர்ச்சி தைலங்களிலும், கண் நோய் மருந்துகளிலும் சேர்க்கப்படுகின்றது. உடம்பில் தேய்த்து குளிக்க தோலைப் பற்றிய நோய்கள் நீங்கும்.

MATERIALS AND METHODS

The study on Kalanjaha padai was performed in Government Siddha Medical College Hospital, Palayamkottai. All the cases were treated in both out patient and in patient ward, Post Graduate Department of Sirappu Maruthuvam.

Selection of Cases

The cases were selected according to the symptoms and signs mentioned in the various Siddha literatures including Sirappu Maruthuvam. Certain criteria were followed for case selection. They are,

Inclusive Criteria

- Family history of Psoriasis
- Pre dispositions to Psoriasis
- Typical Extensor Distribution
- Flexural Psoriasis
- Volar Psoriasis –Psoriasis in toes & nails
- Psoriatic Arthropathy

Exclusive Criteria

- Erythrodermic Psoriasis
- Pustular Psoriasis
- Psoriasis with Secondary Infections
- Psoriasis with Complications

According to the above criteria, 50 cases were selected both out patient and in patient. They belong to the age group between 13 and 80 in both sex.

Priority of admission was given according to the clinical findings. Confirmation of diagnosis was made, by conducting all the necessary investigations in Siddha as well as in Modern Medicine Methodology. 20 cases were treated as In-patient.

Method of case Selection

Diagnosis Method:

- Siddha diagnosis was made with the help of following Methods.

1. Poriyaal arithal
2. Pulanaal arithal
3. Vinaathal
4. Envagai Thervugal(Including neerkuri, neikuri)
5. Thinaigal
6. Paruvakaalangal

(Those are already discussed under review of literature)

- Modern Medicine diagnosis was made with the help of following methods.

General Examination

Anaemia

Jaundice

Cyanosis

Clubbing

Pedal Oedema

Significant lymphadenopathy

Temperature

Respiratory rate

Heart rate

Pulse rate

Blood Pressure

Skin Examination

Site -

Colour -

Size -

Shape -

Border -

Itching -

Erythema -

Macule -

Papule -

Auspitz Sign -

Koebner's Phenomenon -

Candle Grease Sign -

Lab Investigations:

| | | |
|---------------------------------|---|--------------------------------|
| Blood | : | Total WBC Count |
| | | Differential count of WBC |
| | | Erythrocyte sedimentation rate |
| | | Haemoglobin percentage |
| | | Blood Sugar |
| | | Blood Urea |
| | | Serum Cholestrol (LDL & HDL) |
| Urine | : | Albumin |
| | | Sugar |
| | | Deposit |
| Motion | : | Ova |
| | | Cyst |
| Skin scrapping test for fungus. | | |

Selection of drug and its administration

Selection of drug was made from the elaborate study of various Siddha literatures and finally the drug were selected from Gunapadam mooligai and Pharmacopeia of Siddha Research Medicines – G.T. Naidu.

The trial medicines are **“PADAIKKU CHOORANAM”** as internal medicine and **“VEPPAMPATTAI THYLAM”** as external medicine.

Pharmacological analysis of the trial drug was done at the Department of Pharmacology, Government Siddha Medical College, Palayamkottai. The details are given in Annexure.

Bio-chemical analysis was done at the Department of Bio-chemistry, Government Siddha Medical College, Palayamkottai. The details are given in Annexure.

All the 20 in-patients were treated in the IP ward in the duration of 7 to 48 days. After reducing the severity of symptoms, patients were follow up as out patient.

CASE PROFORMA :

They symptoms and signs of Psoriasis , history of present and past illness, Personal history, Nutritional history, Family history, menstrual history, Habits, Laboratory investigations and management were systematically recorded in a proforma.

OBSERVATIONS AND RESULTS

1. Sex Distribution:

For the study of Kalanjaha Padai 20 patients were selected of which 15 cases were males the rest 5 were females.

| Sl.No | Sex | No.of Cases | Percentage |
|-------|--------|-------------|------------|
| 1. | Male | 15 | 75% |
| 2. | Female | 5 | 25% |

2. Age Distribution:

Out of the 20 cases taken for clinical trial ie. six groups of age wise distribution follows:

| Sl.No | age | No.of Cases | Percentage |
|-------|---------|-------------|------------|
| 1. | 18 – 30 | 2 | 10% |
| 2. | 31 – 40 | 3 | 15% |
| 3. | 41 – 50 | 2 | 10% |
| 4. | 51 – 60 | 2 | 10% |
| 5. | 61 – 70 | 9 | 45% |
| 6. | 71 – 80 | 2 | 10% |

3. Kaalam distribution:

According to Siddha literature human life can be classified in to three periods each having approximately 33 years of age with respect to vatha, pitha and kaba dosha dominance one by one respectively.

Considering this into account, twenty eight cases admitted in the ward. Out of 28, I have selected 20 cases and were arranged serially in percentage wise.

| SI.No | Kaalam | No.of Cases | Percentage |
|-------|----------------------------------|-------------|------------|
| 1. | Vatha Kaalam (1-33 years) | 2 | 10% |
| 2. | Pitha Kaalam (33-66 years) | 15 | 75% |
| 3. | Kapha Kaalam (66 – 99 years) | 3 | 15% |

Comparing pithakaalam cases very few cases of vatha and kaba kaalam cases were reported during this study.

4. Occupational status:

| Sl.No | Nature of Work | No.of Cases | Percentage |
|-------|------------------|-------------|------------|
| 1. | Farmer | 7 | 35% |
| 2. | Driver | 1 | 5% |
| 3. | House wife | 3 | 15% |
| 4. | Ryot | 1 | 5% |
| 5. | Coolies | 5 | 25% |
| 6. | Student | 1 | 5% |
| 7. | Building workers | 2 | 10% |

As per the occupational chart, the routine day to day work of the individuals was given as above, comparing others, Farmers and Coolies were complained of this diseases in heavy.

5. Diet habits:

When the cases, admitted for clinical trial were enquired about their daily dietary habits it was entered following.

| Sl.No | Diet Type | No.of Cases | Percentage |
|-------|------------|-------------|------------|
| 1. | Vegetarian | 2 | 10% |
| 2. | Mixed diet | 18 | 90% |

6. Seasonal references:

An annual term consists of (12 months of a year) a classification which includes six paruvakaalam in respect of solar changes. When the 20 cases of clinical trial were enquired about the seasonal state, during the timing of occurrence and severity of the disorder. 40% cases at Munpanikaalam.

| SI.No | Paruva Kaalam | No.of Cases | Percentage |
|-------|---|-------------|------------|
| 1. | Kaar (Avani - Puratasi) Aug 16 – Oct 15 | - | 0 |
| 2. | Koothir (Ayppasi -Karthigai) Oct 16 – Dec 15 | 1 | 5% |
| 3. | Munpani (Markazhi – Thai) Dec 16 – Feb15 | 8 | 40% |
| 4. | Pinpani (Massi – Panguni) Feb 16 – Apr 15 | 4 | 20% |
| 5. | Elavenil (Chithirai –Vaikasi) Apr 16 – June 15 | 7 | 35% |
| 6. | Muthuvenil (Aani & Aadi) June 16 – Aug 15 | 0 | 0 |

7. Thinai reference:

Living area on the whole earth is divided in to five lands. According to the following table as it influences very much for the well being and robust condition of human race except one (ie) desert land.

| Sl.No | Thinai | No.of Cases | Percentage |
|-------|-------------------------|-------------|------------|
| 1. | Kurinji (Hill area) | - | - |
| 2. | Mullai (Forest area) | - | - |
| 3. | Marutham (Fertile land) | 18 | 90% |
| 4. | Neithal (Costal area) | 2 | 10% |
| 5. | Palai (Desert) | - | - |

8. Socio economic condition:

Out of the 20 cases taken most of them were from poor section of the society such as daily wages and slum dwellers. (90%).

| Sl.No | Socio Economic condition | No.of Cases | Percentage |
|-------|--------------------------|-------------|------------|
| 1. | Poor | 18 | 90% |
| 2. | Good | 2 | 10% |

9. Physical constitution (yakkai ilakkanam)

| Sl.No | Yakkai ilakkanam | No.of Cases | Percentage |
|-------|------------------|-------------|------------|
| 1. | Thontha Udal | 10 | 50% |
| 2. | Kaba “ | 5 | 25% |
| 3. | Pitha “ | 2 | 10% |
| 4. | Vatha “ | 3 | 15% |

Among the 20 cases the majority were thontha udal

10. Gunam (Quality and Character):

| Sl.No | Gunam | No.of Cases | Percentage |
|-------|---------------|-------------|------------|
| 1. | Sathuva Gunam | - | - |
| 2. | Rajo Gunam | 20 | 100% |
| 3. | Thamo Gunam | - | - |

11. Family history

| Sl.No | Family history | No.of Cases | Percentage |
|-------|---|-------------|------------|
| 1. | Positive (either parents or grand parents) | - | - |
| 2. | Negative (not related with heredo familial) | 20 | 100% |

12. Triggering factors:

| Sl.No | Triggering factors | No.of Cases | Percentage |
|-------|-----------------------------------|-------------|------------|
| 1. | Infection | - | - |
| 2. | Reaction to certain medication | - | - |
| 3. | Skin injury | 3 | 15% |
| 4. | Psycho – somatic | 5 | 25% |
| 5. | Hormones | - | - |
| 6. | Alcohol | 5 | 25% |
| 7. | Smoking | 7 | 35% |

From the above table 35% were Smokers, 25% were Alcoholics and 25% due to psychosomatic causes.

13. Clinical features

| Sl.No | Clinical features | No.of Cases | Percentage |
|-------|---|-------------|------------|
| 1. | Red patches with ivory (silvery) scales | 20 | 100% |
| 2. | Scalp | 14 | 70% |
| 3. | Auspitz sign | 18 | 90% |
| 4. | Koebner's phenomenon | 10 | 50% |
| 5. | Nail changes | 4 | 20% |
| 6. | Palm and sole lesion | 2 | 10% |

14. Distribution of Tridosha

a. Table illustrating the derangement of vatham

According to the Siddha theory the three chief constituents of the body viz, vatha, pitha and kaba and its classification changes from the normal state to pathological state due to varied etiology. Hence the derangement of doshas in Kalanjaha padai is illustrated in the following table.

| SI.No | Classification of Vatha | No.of Cases | Percentage |
|-------|-------------------------|-------------|------------|
| 1. | Piranan | 1 | 5% |
| 2. | Abanan | 5 | 25% |
| 3. | Udhanan | - | - |
| 4. | Viyanan | 20 | 100% |
| 5. | Samanan | 20 | 100% |
| 6. | Nagan | - | - |
| 7. | Koorman | - | - |
| 8. | Kirukaran | - | - |
| 9. | Devathathan | 5 | 25% |
| 10. | Thananjayan | - | - |

Table illustrating the derangement of Pitha

| SI.No | Classification of Pitha | No.of Cases | Percentage |
|-------|-------------------------|-------------|------------|
| 1. | Analagam | - | - |
| 2. | Ranjagam | 20 | 100% |
| 3. | Sathagam | 20 | 100% |
| 4. | Alosagam | - | - |
| 5. | Pirasagam | 20 | 100% |

Table illustrating the derangement of Kaba

| Sl.No | Classification of kaba | No.of Cases | Percentage |
|-------|------------------------|-------------|------------|
| 1. | Avalambagam | - | - |
| 2. | Kilethagam | - | - |
| 3. | Pothagam | - | - |
| 4. | Tharpagam | 3 | 15% |
| 5. | Santhigam | 3 | 15% |

15. Udal kattugal

The seven thathus which contribute the body for the structure and function get altered accordingly in pathological conditions. Hence in Kalanjaha padai patients the following observations were tabulated as follows.

| Sl.No | Name of Udal kattugal | No.of Cases | Percentage |
|-------|-----------------------|-------------|------------|
| 1. | Saaram | 20 | 100% |
| 2. | Senneer | 20 | 100% |
| 3. | Oon | - | - |
| 4. | Kozhuppu | - | - |
| 5. | Enbu | 3 | 15% |
| 6. | Moolai | - | - |
| 7. | Sukkilam /Suronitham | - | - |

16. Ennvagai thervugal

In Siddha system of Science the eight types of investigations are emphasized much for clinical approach and diagnosis of the disease. Hence the rules were strictly followed and the observation were tabulated

| SI.No | Ennvagi thervugal | No.of Cases | Percentage |
|-------|-------------------|-------------|------------|
| 1. | Naa | - | - |
| 2. | Niram | 20 | 100% |
| 3. | Mozhi | - | - |
| 4. | Vizhi | 8 | 40% |
| 5. | Sparisam | 20 | 100% |
| 6. | Malam | 5 | 25% |
| 7. | Moorthiram | - | - |
| 8. | Naadi | | |
| | Vaatha Pitham | 15 | 75% |
| | Vaatha kabam | 5 | 25% |

Regarding Ennvagai thervugal niram and sparisam were affected in all the patients (100%) malam (constipation) was affected in the 5 cases (25%) regarding naadi the 15 patients had Vaatha Pitham (75%) and the 5 cases had Vaatha Kabam (25%) and vizhi in the 8 cases.

17. Neerkuri, and the neikuri reference

| Sl.No | Type of Test | No.of Cases | Percentage |
|-------|-----------------------------|-------------|------------|
| 1. | Neerkuri-Straw | 20 | 100% |
| | coloured/heycolour | | |
| 2. | Neikuri | | |
| | 1. Muthothunitral | 5 | 25% |
| | 2. Spread like ring | 5 | 25% |
| | 3. Spreading like a serpent | 10 | 50% |

18. Duration of illness

| Sl.No | Duration of illness | No.of Cases | Percentage |
|-------|---------------------|-------------|------------|
| 1. | Below 1 month | 1 | 5% |
| 2. | Between 1-6 month | 4 | 20% |
| 3. | Between 6-12 month | 10 | 50% |
| 4. | 1-3 years | 5 | 25% |

Duration of the sufferings were reported above 6 months-50%
the next is between 1 – 3 years.

Result after treatment

| Sl.No | Result | No.of Cases | Percentage |
|-------|--------|-------------|------------|
| 1. | Good | 12 | 60% |
| 2. | Fair | 8 | 40% |

Out of the 20 cases, 60% of the cases were found good relief
and 40% fair.

DISCUSSION

It is a well known fact that each and every case with the disease Kalanjaha padai is specific by nature. This being the fact, it can be clearly understood that there can be no specific and definite way of treating the disease in a uniform manner. Any attempt made to evaluate the nature of the disease leading to the way of treatment is itself an achievement. In this way the present Kalanjaha Padai is a disease causing social and psychological embarrassment by the nature of producing skin lesions with silvery mica like scales although it is not a life threatening disease. So the patients are anxious and pray for quick and permanent remedies. Siddha system envisages many remedies in this direction.

Kalanjaha Padai, as per its characteristics, resembles Psoriasis Vulgaris in modern medicine. Red raised plaques with silvery scales which bleed pinpointly on removing them are found all over the body. These are the clinical features described in Siddha system of medicine. It is not contagious according to Siddha literature.

The Siddha aspects of Kalanjaha padai are discussed in various Siddha texts. The author has taken this evidence largely from Sirappu maruthuvam, Yugi vaidhya Sinthamani, Agasthiar

paripooranam-400, Siddha Maruthuvanga churukkam and Gurunadi nool. These texts discuss about the aetiology, pathogenesis, clinical features, investigations, diagnosis, prognosis and treatment of Kalanjaha padai.

Treatment aspects include Pathiyam (diet restrictions), Eyama, Nyama [Good aspects in words and deeds], pranayamam (breathing exercises) and Yogasanam (Postures). These are discussed in Siddha literatures like PatharathaGuna Sinthamani, Thirumoolar Thirumanthiram and Sirappu Maruthuvam besides the drug treatment. The above said drugless methodical treatment was very useful in alleviating the stress, one of the main precipitating factors of the disease.

The drug treatment includes the Ahamaruthuvam (Internal Medicine) and Puramaruthuvam (External medicine/topical application). These are found to arrest the disease process and cure it with a quick response or relief.

Twenty cases were selected and admitted for In Patient ward. They were diagnosed and treated according to the criteria found in Siddha texts. Modern routine investigations were also carried out to exclude other systemic diseases if any.

Sex distribution

In the study period among the 20 cases 15 were males and the rest were Females. According to the text books there is no apparent sex predilection in Kalanjaha padai, but the major vulnerability of males may be due to their life style with augmented mental strain, when compared with females.

Age distribution

During the entire course of study the author found the disease Kalanjaha padai affects the age group between 20 and 80.

Kaalam distribution.

The clinical study revealed that the incidence of the disease was highest in Pitha kaalam (33 - 66 years) -75 %.

Occupation and socio economic status

Out of the 20 cases 18 cases were from poor socio-economic status 2 cases belong to middle class. Most of them get daily wages.

Diet habits

18 patients have mixed diet and 2 patients were purely vegetarian.

Seasonal reference

Out of 20 cases, the maximum of cases were admitted during munpani kaalam.

Thinai reference

Among 20 cases treated, 18 cases belongs to Marutha Nilam and 2 cases belongs to Neithal Nilam. Even though, the literature says no disease will occur in 'marutha nilam', it was not correlated with this study.

Triggering factors

The subjects include alcoholic, smoker, psychologically stressed and had skin injury.

Tridosha reference

In tridoshas especially in Vatham, abanan was affected in 25 % of cases and samanana, viyanana in 100 % of cases. In pitham, Ranjagam, Sathagam and Prasagam were affected in all cases. In Kabam, Tharpagam was affected in 15% and Santhigam affected in 15% of cases.

Udal kattugal reference

Out of 7 udal thathus, Senneer was affected in all the 20 cases and Saram and Enbu were also affected.

Ennvagai thervugal

Niram and sparisam were affected in all 20 cases as there were dryness, roughness and thickness of the skin, pinpoint bleeding on removing the scales. Habitual constipation was reported in 5 cases. Vaatha Pitham Nadi was noted in 15 cases and Vaatha Kabam in 5 cases.

Modern laboratory investigations such as TC, DC, ESR, Hb, Blood Sugar, Urea, Serum cholesterol, VDRL, Urine for albumin, sugar and deposits, Motion for ova and cyst were carried out at the laboratory of Government Siddha Medical College, Palayamkottai to rule out other systemic involvement.

Well defined non indurated dry erythematous areas with silvery white scales, in layer by layer, scaly form, candle grease sign, Auspitz sign, Koebner's phenomenon with little or no itching are the clinical features of Psoriasis which resemble Kalanjaha Padai and the disappearance of these were considered as the criteria for determining the cure of the disease.

The drugs under the clinical trial were,

1. Padaikku Chooranam - 1 gm daily 3 times with hot water.
2. Veppampattai thylam for topical application.

The preparations and dosage of these drugs were taken from, Gunapadam-mooligai Vaguppu and Pharmacoe pia of Siddha Research Medicines.

All the patients were instructed to follow pathiyam, irrespective of O.P. and I.P. Patients.

Mica like scales was reduced to minimum variations within 15 days of treatment. Raised, non indurate plaques were also reduced in size during this period.

A marked and gradual disappearance of Auspitz sign was noticed everyday. During the time of treatment the patients were uniformly advised to follow Yogasanas and Pranayamam. These methods gave them a good supportive therapy and patients felt better while practicing them.

Pharmacological analysis of the trial drugs were done at the Department of Pharmacology and Biochemical analysis of the test drug was done at the Department of Bio chemistry, Govt. Siddha Medical college, Palayamkottai.

SUMMARY

The disease kalanjaha padai was taken for the clinical study. The clinical study on kalanjaha padai with reference to its aetiology, pathogenesis, clinical features, investigation, diagnosis and treatment was conducted at the Post Graduate Department of sirappu Maruthuvam, Government Siddha Medical College, Palayamkottai. Twenty cases with the signs and symptoms of kalanjaha padai were selected and a thorough observation was made. They were found out from the outpatient department and admitted in the inpatient ward.

No adverse reactions like nausea, vomiting, diarrhoea were reported during the study period. The drugs employed in the clinical study were given to use only after careful purification process.

The majority of the patients were male. The trial drug had mainly kaippu suvai and this mainly accounts for the therapeutic effect in skin diseases.

The results were found to be encouraging. Among the inpatients treated 60% shows good results and 40% shows moderate results. In out patients 10 cases were treated with both internal and external medicines. Out of these 100% shows good

results. 5 cases treated only with internal medicine. Out of these 60% shows good and 40% fair. 5 cases treated only with external medicine. Out of these 40% good and 60% fair.

For chronic skin diseases, Siddha system of medicine confers excellent therapeutic agents than the other systems. Also clinical evaluations and specific laboratory tests confirm this statement.

In Bio-Chemical analysis Padaikku Chooranam contains, calcium, unsaturated compound, Amino acids.

In pharmacological studies of Padaikku Chooranam shows good anti-histaminic action, significant anti-inflammatory action, Significant analgesic action and Veppam Pattai Thylam shows significant anti-inflammatory action.

The drug of choice for both internal as well as external are economically less costly. Regarding the preparation point of view the drug was easily to be prepared.

No side effect was reported for the drug and with short duration with certain restriction this disease can be cured. As research point of view the author has a challenging work by these preparations for this skin disorder.

CONCLUSION

1. The treatment was given for Psoriasis on the basis of Siddha system principles. Deranged three doshas were corrected by the author prepared medicine given.
2. Padaikku Chooranam as an internal medicine and veppam pattai thylam as an external application respectively.
3. In the above medicines, internal medicine was selected from Gunapadam - Mooligai vaguppu. and external medicine was selected from the Pharmacopeia of Siddha Research Medicines - G.T.Naidu.
4. IP - 60% of cases found Good results 40% have Fair.
5. OP – 75% of cases found Good results 25% have Fair.
6. The clinically the drugs were free from adverse effect.
7. Preparation of both, Internal and External Medicines were simple.
8. Hence it is concluded that the trial drugs were effective against Psoriasis.

A STUDY ON KALANJAHHA PADAI

Dissertation Submitted To

THE TAMIL NADU DR.M.G.R Medical University

Chennai – 32

For the Partial fulfillment for The Award of Degree of

DOCTOR OF MEDICINE (SIDDHA)

(Branch – III, SIRAPPU MARUTHUVAM)



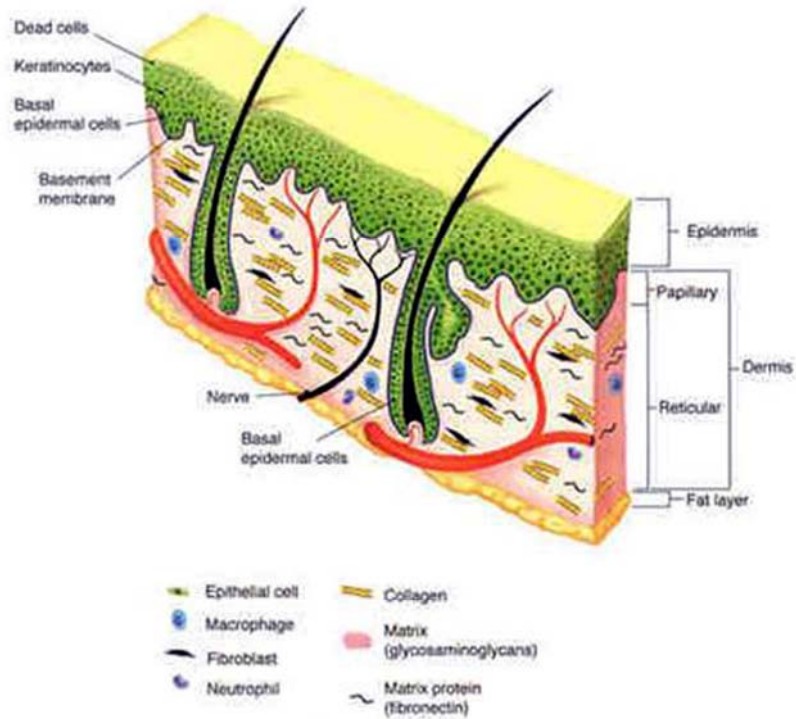
DEPARTMENT OF SIRAPPU MARUTHUVAM

Government Siddha Medical College

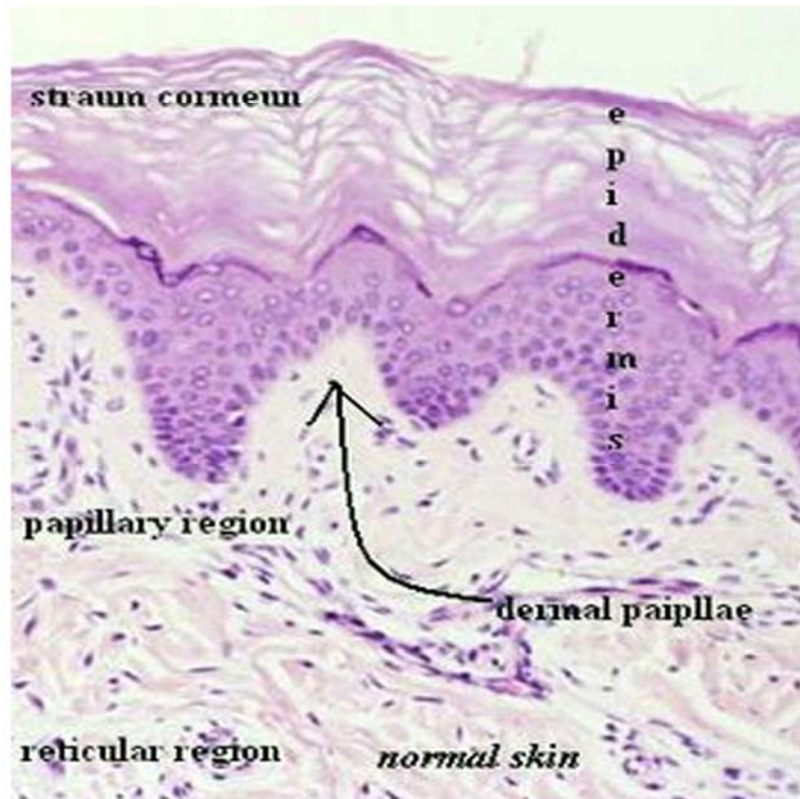
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SEPTEMBER – 2008

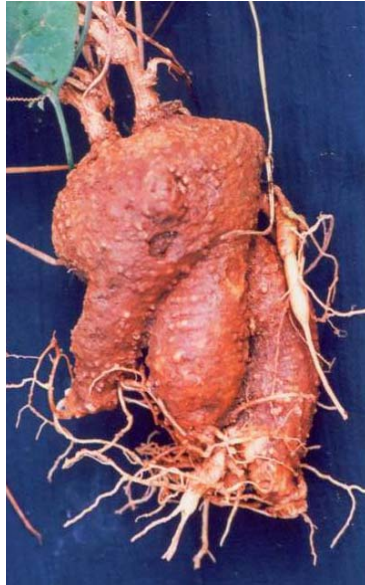
Anatomy of normal skin



Histo pathology



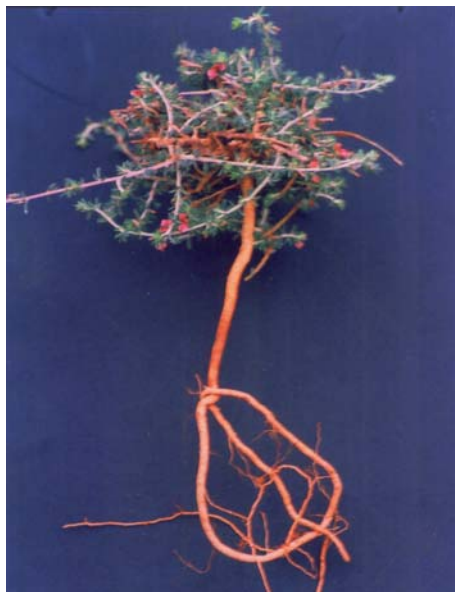
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CHLOORANAM



SIVANAR VEMBU (*INDIGOFERA ASPALATHOIDES*)



CHLOORANAM



PADAIKKU CHOORANAM



VEPPAMPATTAI THYLAM



VEPPAMPATTAI THYLAM

VEPPAMPATTAI



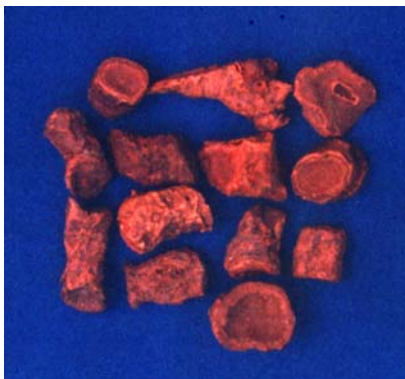
NANNARI VER PATTAI



COCONUT OIL



MANJITTI PATTAI



ELARISI



PHOTOS OF THE PATIENTS BEFORE AND AFTER TREATMENT

PSORIASIS INVERSUS

**Patient : Mohd. Usain – 40 / Male (OP Patient)
Before Treatment**



During Treatment



After Treatment



PSORIASIS

Patient : Samsudeen - 50 / Male (OP Patient)

Before Treatment



After Treatment



Patient : Shanmugam – 45 / Male (IP Patient)

Before Treatment



After Treatment



Patient : Kalyana Sundaram - 61 / Male (IP Patient)

Before Treatment



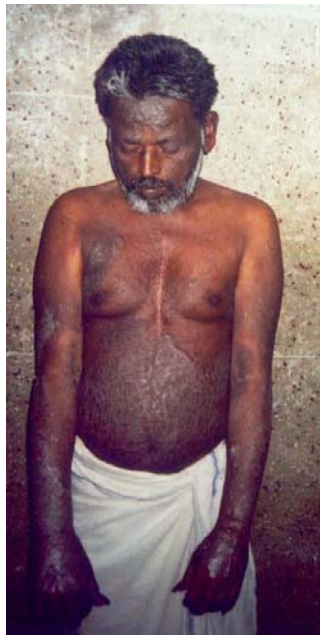
Patient : Kalyana Sundaram - 61 / Male (IP Patient)

After Treatment



Patient : Ramamoorthy – 49 / Male (IP Patient)

Before Treatment



Patient : Ramamoorthy – 49 / Male (IP Patient)

After Treatment



EVIDENCE FOR HEREDITARIAL CAUSE FOR PSORIASIS (OP PATIENTS)



Poongothai
Age : 42

Tamil Arasi
Age : 54

Gomathi
Age : 53

The Sisters (siblings born to same parents) in above photo is here taken as an evidence for hereditarial cause for Psoriasis. Lesions are in same place (fore arm and legs) for them all.

AFTER TREATMENT



Patient : Seiyathu Beevi – 45 / Female (OP Patient)

Before Treatment



After Treatment



Patient : Viji – 24 / Male (IP Patient)

After Treatment

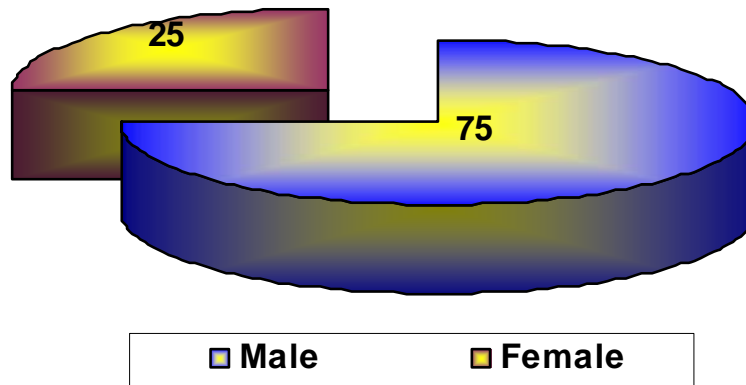


Patient : Viji – 24 / Male (IP Patient)

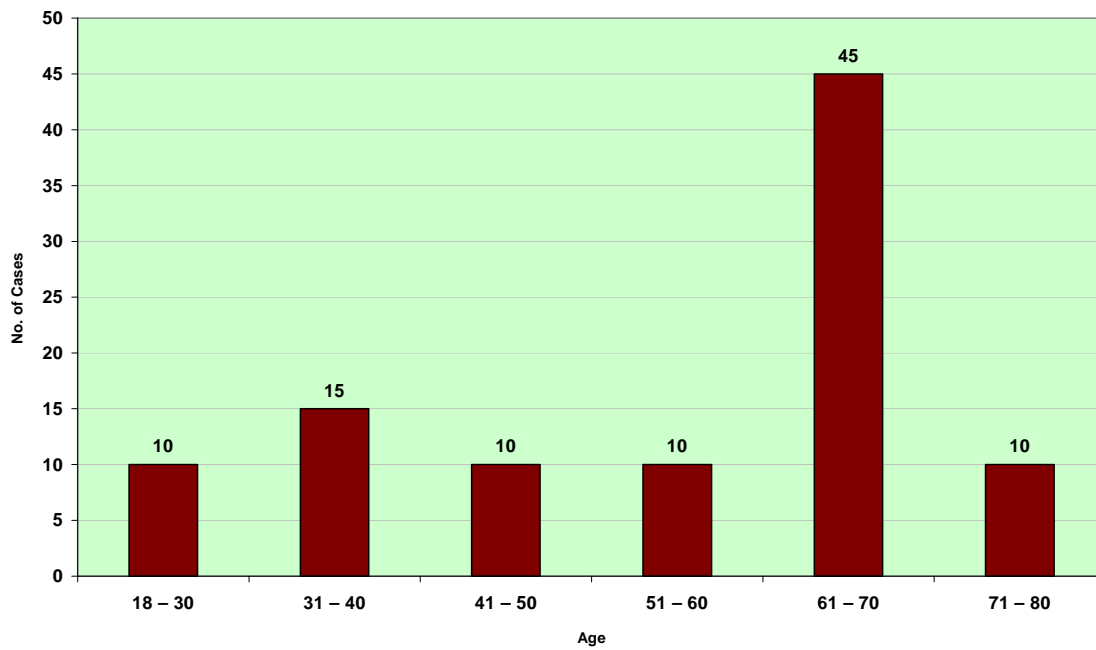
Before Treatment



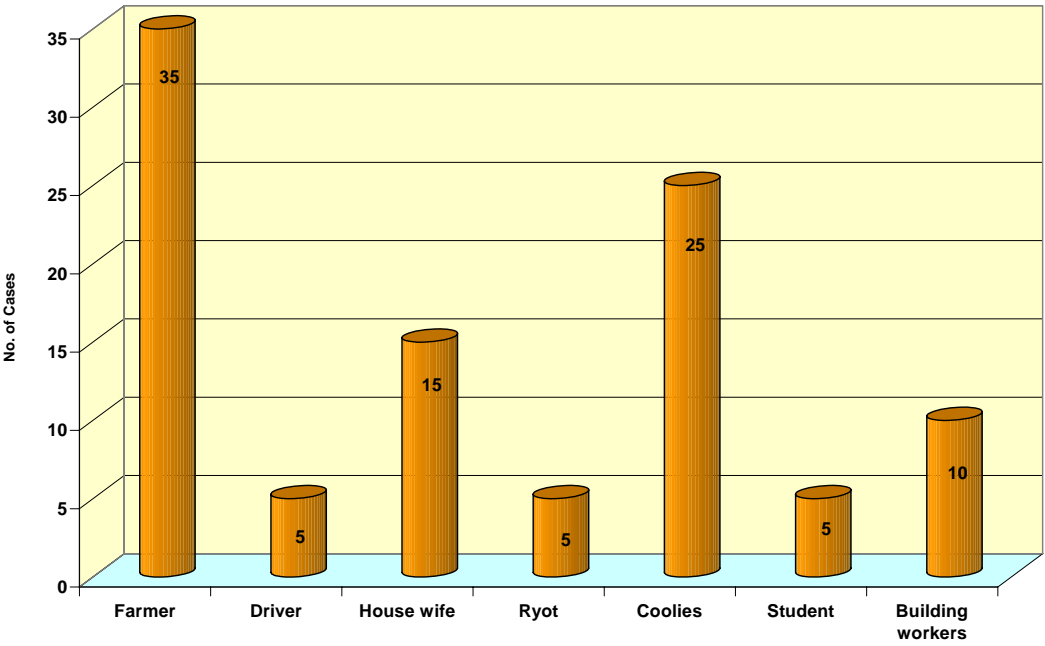
GRAPH SHOWING SEX DISTRIBUTION



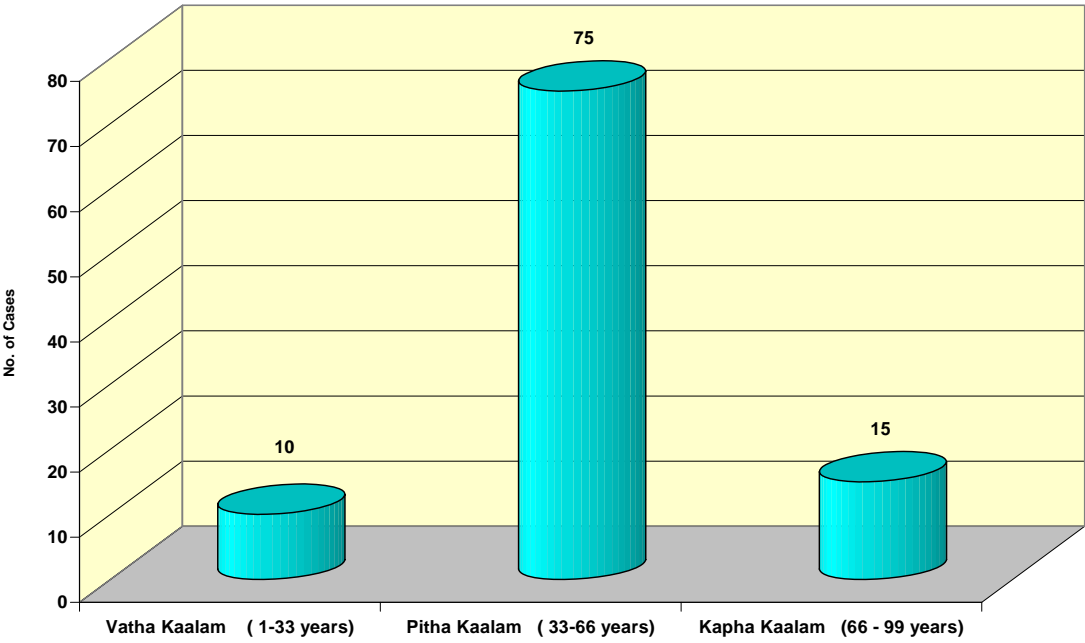
GRAPH SHOWING AGE DISTRIBUTION



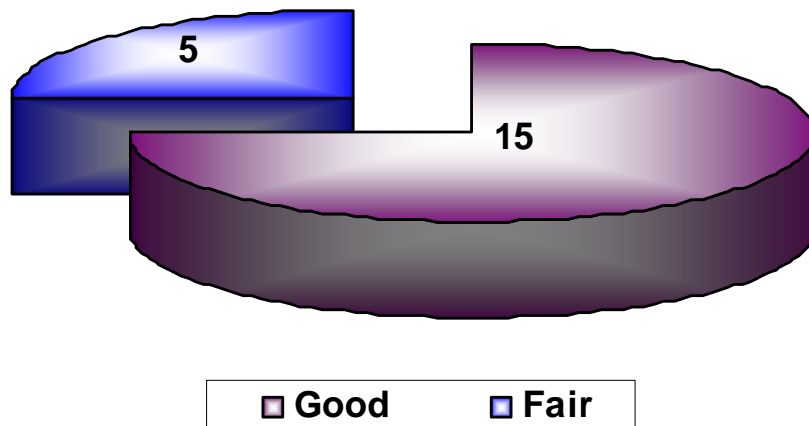
GRAPH SHOWING OCCUPATIONAL DISTRIBUTION



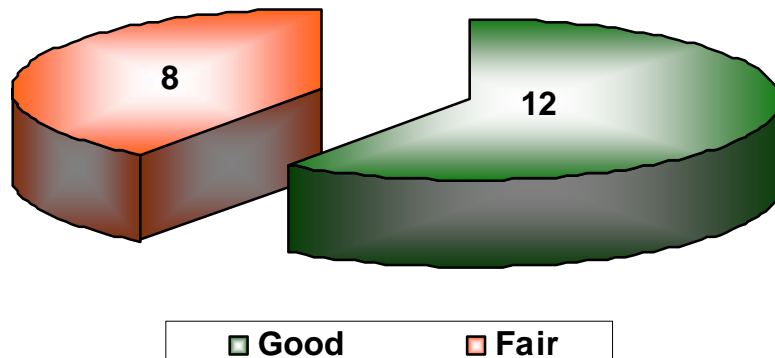
GRAPH SHOWING KALAM DISTRIBUTION



GRAPH SHOWING REPORT OF O.P. CASES



GRAPH SHOWING REPORT OF I.P. CASES



LIST OF OUT PATIENTS

Out patients treated with both internal and external medicines

| Sl. No | Date | O.P.No. | Name | Age/Sex | Complaints | | | No. of days | Report |
|--------|------------|---------|------------------|---------|------------|--------------------|--------------|-------------|--------|
| | | | | | Scaling | Candle Grease Sign | Auspitz Sign | | |
| 1 | 23.01.2007 | 7837 | Krishnan | 43/M | Present | Present | Present | 77 | Good |
| 2 | 08.01.2007 | 3623 | Seiyadu Beevi | 45/F | Present | Present | Present | 91 | Good |
| 3 | 15.02.2007 | 14191 | Arumugam | 68/M | Present | Present | Present | 63 | Good |
| 4 | 13.03.2007 | 20663 | Chithra | 24/F | Present | Present | Present | 35 | Good |
| 5 | 13.02.2007 | 13506 | Thamilarasi | 54/F | Present | Present | Present | 63 | Good |
| 6 | 08.01.2007 | 3627 | Gomathi | 53/F | Present | Present | Present | 70 | Good |
| 7 | 08.01.2008 | 2849 | Aathimoolam | 35/M | Present | Present | Present | 35 | Good |
| 8 | 27.12.2007 | 5622 | Vembadi Maharaja | 20/M | Present | Present | Present | 42 | Good |
| 9 | 10.12.2007 | 72862 | Mohamed Husain | 40/M | Present | Present | Present | 70 | Good |
| 10 | 10.12.2007 | 7288 | Ramaiah Moopnar | 62/M | Present | Present | Present | 70 | Good |

Out patients treated with internal medicine

| Sl. No | Date | O.P.No. | Name | Age/Sex | Complaints | | | No. of days | Report |
|--------|------------|---------|--------------|---------|------------|--------------------|--------------|-------------|--------|
| | | | | | Scaling | Candle Grease Sign | Auspitz Sign | | |
| 1 | 08.01.2007 | 3626 | Samsudeen | 50/M | Present | Present | Present | 91 | Good |
| 2 | 14.03.2007 | 20952 | Kavitha | 16/F | Present | Present | Present | 35 | Good |
| 3 | 16.02.2007 | 14368 | Nambi | 50/M | Present | Present | Present | 63 | Good |
| 4 | 07.01.2008 | 2335 | Patturaj | 29/M | Present | Present | Present | 21 | Fair |
| 5 | 18.12.2007 | 74136 | Senbagavalli | 52/M | Present | Present | Present | 28 | Fair |

Out patients treated with external medicine

| Sl. No | Date | O.P.No. | Name | Age/Sex | Complaints | | | No. of days | Report |
|--------|------------|---------|-----------------|---------|------------|--------------------|--------------|-------------|--------|
| | | | | | Scaling | Candle Grease Sign | Auspitz Sign | | |
| 1 | 20.02.2007 | 15447 | Saraswathi | 70/F | Present | Present | Present | 63 | Good |
| 2 | 13.03.2007 | 20657 | Lakshmanan | 52/M | Present | Present | Present | 35 | Good |
| 3 | 19.12.2007 | 14366 | Shanmugathaiah | 42/F | Present | Present | Present | 28 | Fair |
| 4 | 26.12.2007 | 75276 | Nainar | 45/M | Present | Present | Present | 28 | Fair |
| 5 | 18.12.2007 | 74132 | Manthirathammal | 82/F | Present | Present | Present | 28 | Fair |

Table shows report of 20 I.P Cases

| S. No | IP. No | Name of the Patient | Age | Sex | Date of Admission | Drug and dose | Date of Discharge | No.of Days | Results |
|-------|--------|---------------------|-----|-----|-------------------|--|-------------------|------------|---------|
| 1 | 593 | Kalyanasundaram | 61 | M | 24.02.2007 | Padaikku Chooranam - 1 gm T.D.S. Veppampattai Thylam - 30ml (ext) | 04.04.2007 | 41 | Good |
| 2 | 794 | Maharajan | 50 | M | 20.03.2007 | | 25.04.2007 | 36 | Good |
| 3 | 863 | Muthammal | 40 | F | 29.03.2007 | | 27.04.2007 | 29 | Good |
| 4 | 2992 | Sethuraman | 63 | M | 09.12.2007 | | 07.01.2008 | 29 | Good |
| 5 | 56 | Sethu | 65 | M | 08.01.2008 | | 06.02.2008 | 29 | Good |
| 6 | 64 | Murugan | 40 | M | 10.01.2008 | | 22.01.2008 | 13 | Fair |
| 7 | 187 | Jesuraj | 37 | M | 23.01.2008 | | 06.02.2008 | 15 | Fair |
| 8 | 201 | Somu | 75 | M | 24.01.2008 | | 12.02.2008 | 20 | Good |
| 9 | 202 | Lakshmi | 60 | F | 24.01.2008 | | 13.02.2008 | 21 | Good |
| 10 | 213 | Rama Moorthy | 49 | M | 25.01.2008 | | 18.02.2008 | 25 | Good |
| 11 | 269 | Manikandan | 28 | M | 30.01.2008 | | 11.03.2008 | 41 | Good |
| 12 | 331 | Sundaram | 55 | M | 04.02.2008 | | 11.03.2008 | 37 | Good |
| 13 | 631 | Lakshmanan | 65 | M | 05.03.2008 | | 18.03.2008 | 14 | Fair |
| 14 | 1063 | Mariappan | 65 | M | 26.04.2008 | | 05.05.2008 | 11 | Fair |
| 15 | 1096 | Shanmugam | 70 | M | 15.04.2008 | | 29.04.2008 | 15 | Fair |
| 16 | 1115 | Maideen | 79 | M | 02.05.2008 | | 17.05.2008 | 16 | Good |
| 17 | 1127 | Viji | 24 | M | 03.05.2008 | | 30.05.2008 | 28 | Good |
| 18 | 1129 | Vijayalakshmi | 63 | F | 03.05.2008 | | 15.05.2008 | 13 | Fair |
| 19 | 1131 | Vellathai | 62 | F | 03.05.2008 | | 13.05.2008 | 11 | Fair |
| 20 | 1149 | Santha | 62 | F | 06.05.2008 | | 19.05.2008 | 14 | Fair |

ANNEXURE - I

PREPARATION OF TRAIL DRUGS

1. படைக்குச் சூரணம்

தேவையான சரக்குகளும் அவற்றின் அளவும்

| | | |
|---|---|------------|
| ஆகாச கருடன் வேர் கிழங்கு (சுத்தித்தது) | - | 500 கிராம் |
| சிவனார்வேம்பு சமூலம் (சுத்தித்தது) | - | 500 கிராம் |

செயல்முறை

ஆகாச கருடன் வேர் கிழங்கை தோல் சீவி சிறு சிறு பகுதிகளாக வெட்டி காய வைத்ததையும் மற்றும் சிவனார்வேம்பு சமூலத்தை நிழலிலிட்டு உலர்த்தியதையும் தனித் தனியே உரழில் இட்டு இடித்து சூரணமாக்கி சலித்து வஸ்திரகாயம் செய்து எடுத்து இரண்டையும் கலந்து கொள்ள வேண்டும்.

அளவு

1 கிராம் முதல் 2 கிராம் வரை தினமும் மூன்று வேலை உணவிற்கு பின்பு அனுபானம் : வெந்நீர்.

தீரும் நோய்கள்

தோலைப் பற்றி வரும் படைகள், பெருநோய், மாகுஷ்டம், நஞ்சு, கரப்பான், நமைச்சல், நாட்பட்ட புண், சொறி, சிரங்கு நீங்கும்.

சூரணம் சுத்தி செய்முறை

ஒரு வாயகன்ற மண் சட்டியில் சூரணத்தின் எடைக்கு எட்டு பங்கு பால் விட்டு வேடு கட்டி துணியின் மீது சூரணத்தைச் சிறிது பால் விட்டுப் பிசறி வைத்து பின்பு மேலகல் கொண்டு மூடி இறுதியாக பால் சுண்டும் வரை எரித்து எடுத்து பின்பு நிழலில் உலர்த்தி சூரணமாக்கி எடுத்துக் கொள்ள வேண்டும்.

ஆதாரம் : குணபாடம் மூலிகை வகுப்பு

2. வேப்பம் பட்டை தைலம்

தேவையான சரக்குகளும் அவற்றின் அளவும்

| | | |
|---------------------------------|---|-----------------------|
| தேங்காய் எண்ணெய் | - | 5 லிட்டர் |
| வேப்பம் பட்டை (நன்கு சிதைத்தது) | - | 500 கிராம் |
| நன்னாரி வேர் பட்டை | - | 200 கிராம், 50 கிராம் |
| சிவப்பு மஞ்சிட்டி பட்டை | - | 200 கிராம், 50 கிராம் |
| ஏலரிசி சூரணம் | - | 50 கிராம் |

குடிநீர் செய்து கொள்ள

| | | |
|---------------------------------|---|------------|
| வேப்பம் பட்டை (நன்கு சிதைத்தது) | - | 500 கிராம் |
| நன்னாரி வேர் பட்டை | - | 200 கிராம் |
| சிவப்பு மஞ்சிட்டி பட்டை | - | 200 கிராம் |

மேற்கண்டவைகளை நான்கு லிட்டர் நீரிலிட்டு கொதிக்க வைத்து 1/8 பாகமாக சுண்டும் வரை எரித்து எடுக்க வேண்டும்.

கற்கம் செய்து கொள்ள

| | | |
|--------------------------------|---|-----------|
| நன்னாரி வேர் பட்டை சூரணம் | - | 50 கிராம் |
| சிவப்பு மஞ்சிட்டி பட்டை சூரணம் | - | 50 கிராம் |
| ஏலரிசி சூரணம் | - | 50 கிராம் |

மேற்கண்டவைகளை சிறிது நீர் விட்டு நன்கு கற்கமாக அரைத்துக் கொள்ள வேண்டும்.

செயல்முறை

ஒரு இரும்பு சட்டியில் மேற்படி குடிநீர் மற்றும் கற்கத்தை தேங்காய் எண்ணெயில் கலந்து காய்ச்சி மெழுகு பதத்தில் எண்ணெயை எடுத்துக் கொள்ள வேண்டும்.

அளவு

தேவையான அளவு வெளிப்பிரயோகமாக உபயோகிக்க வேண்டும்.

தீரும் நோய்கள்

காளாஞ்சகப்படை, படை, விரணம், புண் மற்றும் அனைத்து வித தோல் நோய்களும் தீரும்.

ஆதாரம் : The Pharma Copoeia of Siddha Research Medicine

ANNEXURE - II

BIO-CHEMICAL ANALYSIS OF PADAIKKU CHOORANAM

Preparation of the Extract

5 gram of chooranam was weighed accurately and placed in a 250 ml clean beaker, then 50ml of distilled water was added and dissolved well. Then it was boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it was diluted to 100ml with distilled water. This fluid was taken for analysis.

| S.NO | EXPERIMENT | OBSERVATION | INFERENCE |
|------|---|---------------------------|---------------------|
| 1. | <u>TEST FOR CALCIUM</u> 2ml of the above prepared extract was taken in a clean test tube. To this added 2 ml of 4% Ammonium oxalate solution was added. | A white colour is formed | Presence of calcium |
| 2. | <u>TEST FOR SULPHATE:</u> 2ml of the extract was added to 5% barium chloride solution. | No white colour is formed | Absence of Sulphate |
| 3. | <u>TEST FOR CHLORIDE</u> The extract was treated with silver nitrate solution. | No white colour is formed | Absence of chloride |

| | | | |
|-----|--|-------------------------------------|---|
| 4. | <u>TEST FOR CARBONATE</u> The extract was treated with concentrated HCL. | No brisk effervescence is formed | Absence of carbonate |
| 5. | <u>TEST FOR STARCH</u> The extract was added with weak iodine solution. | No blue colour is formed | Absence of starch. |
| 6. | <u>TEST FOR IRON FERRIC</u> The extract was treated with concentrated Glacial acetic acid and potassium ferro cyanide. | No blue colour is formed | Absence of ferric |
| 7. | <u>FERROUS:</u> The extract was treated with concentrated Nitric acid and ammonium thio cyanate. | Blood red colour is formed | Indicates the presence of ferrous Iron |
| 8. | <u>TEST FOR PHOSPHATE</u> The extract was treated with ammonium Molybdate and concentrated Nitric acid. | No yellow precipitate is formed | Absence of Phosphate |
| 9. | <u>TEST FOR ALBUMIN</u> The extract was treated with Esbach's reagent. | No yellow precipitate is formed | Absence of albumin |
| 10. | <u>TEST FOR TANNIC ACID</u> The extract was treated with ferric chloride. | No blue black precipitate is formed | Absence of Tannic acid |
| 11. | <u>TEST FOR UNSATURATION</u> Potassium permanganate solution was added to the extract. | If gets decolourised | Indicates the presence of unsaturated compound. |

| | | | |
|-----|---|-------------------------|--------------------------------------|
| 12. | <u>TEST FOR THE REDUCING SUGAR</u> 5ml of Benedict's qualitative solution was taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts. | No colour change occurs | Absence of reducing sugar |
| 13. | <u>TEST FOR AMINO ACID:</u> One or two drops of the extract was placed on a filter paper and dried it well. After drying, 1% Ninhydrin was sprayed over the same and dried it well. | Violet colour is formed | Indicates the presence of amino acid |

ANNEXURE - III

PHARMACOLOGICAL ANALYSIS

ACUTE ANTI-INFLAMMATORY ACTIVITY IN RATS

BY HIND PAW METHOD

AIM :

To demonstrate the acute anti-inflammatory activity of **Padaikku Chooranam** in albino rats by Hind Paw Method.

PREPARATION OF THE TEST DRUG :

1gm of **Padaikku Chooranam** was suspended in 10 ml of water. From the above test drug 2 ml was administered orally. 1 ml contain 100 mg of **Padaikku Chooranam**.

PROCEDURE :

Six albino rats weighting 100-150 gm were taken and divided into three groups and each group consisting 2 rats.

First group was kept as control and received water. Second group received Ibuprofen at a dose of 20mg/100 gm body weight. Third group of animals received **Padaikku Chooranam**.

Before administration of drugs, the hind paw volume of all rats was measured. This was done by dipping the hind paw up to the tibio tarsal junction in a mercury plethysmograph. Soon after the measurement the drug was administered.

One hour after the administration of drug a sub cutaneous injection of 0.1ml of 1% w/v of carrageenin in water was made into plantar surface of both the hind paw of each rat.

Three hours after carrageenin injection, the hind paw volume was measured once again. Difference between the initial and final value were noted and compared.

The method is more suitable for studying anti inflammatory activity on acute inflammation.

The result of the drug is compared with the standard as well as control group.

| S. No | Group | Dose/100mg body weight | Initial reading average | Final reading average | Mean difference | Percentage of inflammation | Percentage of inhibition |
|-------|----------|------------------------|-------------------------|-----------------------|-----------------|----------------------------|--------------------------|
| 1. | Control | Water 2 ml | 0.65 | 1.45 | 0.8 | 100 | Nil |
| 2 | Standard | Ibuprofen 20 mg | 0.8 | 0.85 | 0.05 | 6.25 | 93.75 |
| 3 | Test | Padaikku Chooranam | 0.85 | 1.1 | 0.25 | 31.25 | 68.75 |

INFERENCE :

From the above experiment it is observed that the test drug

Padaikku Chooranam has **Significant Anti Inflammatory Action.**

ANALGESIC STUDY OF PADAIKKU CHOORANAM BY THE TAIL FLICK METHOD IN ALBINO RATS

Aim

To study the analgesic effect of Padaikku Chooranam.

Preparation of test drugs

1gm of Padaikku Chooranam was dissolved in 5ml of milk and 10ml of distilled water. A dose 2ml was given to each rat. This 2ml contains 200mg of test drug.

Instrument

Analgesiometer or Dolori – Meter using heated nichrome wire as the source of stimulus.

Procedure

Three groups of healthy albino rats on both sexes were selected, each group having 3 rats. Each rat was put inside a rat holder with the tail projecting out fully. The tip of the tail was kept over the nichrome wire of the analgesio meter without touching it.

Now the current of 5mA was passed through the analgesio meter to heat the nichrome wire by switching it on, at the same time starting a stop watch. The time taken for the rat to flick the tail was noted. This is the reaction time. The reaction time is noted for each rate and the average is calculated.

First group was given 2ml of distilled water and kept as control. Second group was administered with paracetamol at a dose of 10mg/100gm of body weight orally. The test drug Padaikku Chooranam was administered to the third group at dose of 200mg/100gm of body weight.

After the lapse of one hour, the reaction time of each rat was note in each group at interval of 2 minutes (When a rat fails to flick the tail, it should not be continued beyond 8 seconds to avoid injury) and the average is calculated.

The results of control group, standard group and drug treated group were tabulated and compared.

Effect of Padaikku Chooranam

| Sl. No | Name of Drugs / Groups | Dose /100 gm body weight | Initial Reading (in secs) | After Drug Administration | | | Mean Diff |
|--------|------------------------|--------------------------|---------------------------|------------------------------------|------------------------|--------------------------------------|-----------|
| | | | | $\frac{1}{2}$ hr average (in secs) | 1 hr average (in secs) | 1 $\frac{1}{2}$ hr average (in secs) | |
| 1 | Control (Water) | 2 ml | 2 | 2.5 | 2.5 | 2.5 | 2.5 |
| 2 | Standard (Paracetamol) | 20 mg | 2 | 3 | 5 | 6.5 | 6.7 |
| 3 | Padaikku Chooranam | 200 mg | 2 | 3 | 5 | 6 | 6 |

Inference : The Drug has **Significant Analgesic action.**

ANTI-HISTAMINIC EFFECT OF PADAIKKU CHOORANAM ON ISOLATED ILEUM OF GUINEA PIG

Aim:

To study the Anti-histaminic effect of **Padaikku Chooranam**

PREPARATION OF TEST DRUG:

1 gm of **Padaikku Chooranam** dissolved in 10 ml of distilled water and mixed well.

SOLUTION REQUIRED:

Histamine (1 in 1, 00,000 strength)

PROCEDURE:

A guinea pig weighing about 450 gms was starved for 48 hrs and only water was allowed. It was killed by stunning with a sharp blow on the head and cutting its throat to bleed it, to death. The abdomen was quickly opened and the viscera inspected and loops of intestine identified. Use the patch as a landmark the ileum was removed and placed in a shallow dish containing warm "Tyrode solution", the lumen of the ileum was gently rinsed out with saline. It was cut into segments of required length, generally 4 cm, in the fully relaxed state and the sutures were made with needle and tied at either ends and segment is suspended in an isolated organ bath. It was aerated by an oxygen tube and immersed in Tyrode solution at 37°C. Drugs were given to study the inhibitory effect of histamine induced contractions.

INFERENCE:

The test drug has **Good Anti-Histaminic action.**

**ACUTE ANTI-INFLAMMATORY STUDY ON VEPPAMPATTAI
THYLAM (EXTERNAL USE)
BY HIND-PAW METHOD IN ALBINO RATS**

Aim:

To study the acute Anti-inflammatory activity of the test drug-
Veppampattai thylam.

PREPARATION OF THE TEST DRUG:

The thylam was prepared as per the Siddha Research Pharmacoeopia and described in annexure.

PROCEDURE:

Nine healthy albino rats weighing 100-150 gm were taken and divided in to three groups, each consisting of 3 rats.

First group was kept as control by giving distilled water of 2 ml/100 gm of body weight. The second group was given Ibuprofen at a dose of 20 mg/100 gm of body weight. The third group was kept as test group.

Before the administration of the best drug the hind-paw volumes of all rats were measured. This was done by dipping the hind-paw (up to tibio-tarsal junction) in to a mercury plethysmograph. While dipping the hind-paw by pulling the syringe piston, the level of mercury in the center small tube was made to coincide with red marking and reading was noted from the plethysmograph.

Soon after the measurement, the drug was administered to the later, a sub cutaneous injection of 0.1ml of 1% (W/V) carrageenin in water was made into plantar surface of both hind paw of each rat. To the third (test) group Aadutheenda palai vembu thylam was topically applied for three times over the inflamed surface in a thin layer within half an hour gap.

One and half-hours after injection the hind-paw volume was measured once again. The difference between the initial and final volume would show the amount of inflammation. Taking the volume in the control group as 100% inflammation, anti-inflammatory effect of the test group is calculated

| ACUTE ANTI INFLAMMATORY STUDIES | | | | | | | |
|--|---------------------------------|----------------------|--------------------------------|------------------------------|------------------|--------------|--------------|
| DRUG : VEPPAMPATTAI THYLAM | | | | | | | |
| S. No | Group Drug | Dose/100gm bw | Initial reading average | Final reading average | Mean Diff | % Inf | % Inh |
| 1. | Control –water | 2ml | 0.65 | 1.45 | 0.8 | 100 | Nil |
| 2. | Standard – Ibu profen | 20 mg | 0.8 | 0.85 | 0.05 | 6.25 | 93.75 |
| 3. | Test Drug - Veppampattai thylam | Ext | 0.8 | 1.1 | 0.3 | 37.5 | 62.5 |

Inference:

The drug has **Significant Anti-Inflammatory Action.**

ANNEXURE - IV

GOVERNMENT SIDDHA MEDICAL COLLEGE HOSPITAL,

PALAYAMKOTTAI

POST GRADUATE – SIRAPPU MARUTHUVAM DEPARTMENT

(P.G.III)

AN OPEN TRIAL OF SIDDHA TREATMENT

DISEASE: KALANJAH PADAI

DRUG: INTERNAL : PADAIKKU CHOORANAM

EXTERNAL: VEPPAMPATTAI THYLAM

1. O.P NO: ----- 2. BED NO: ----- 3. S.NO:

4. NAME: ----- 5. AGE (yr) 6.GENDER: M F

7. OCCUPATION: -----

8. POSTAL ADDRESS

9. COMPLAINTS AND DURATION

10. HISTORY OF PRESENT ILLNESS

11. PAST HISTORY

12. FAMILY HISTORY: 1.NO ☐ 2. YES ☐

13. MENSTRUAL HISTORY:

1. N.A ☐ 2. Not attained puberty ☐ 3. Menstrual cycle-Regular ☐
4. Menstrual cycle-Irregular ☐ 5 . Attained Menopause ☐

HABITS

| | Yes(1) | No (2) |
|--------------------|--------------------------|--------------------------|
| 14.Smoker | <input type="checkbox"/> | <input type="checkbox"/> |
| 15.Alcoholic | <input type="checkbox"/> | <input type="checkbox"/> |
| 16.Betelnut chewer | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Non-vegetarian | <input type="checkbox"/> | <input type="checkbox"/> |

GENERAL EXAMINATION

| | |
|---------------------------|---|
| 18. Body weight [kg] | <input type="text"/> <input type="text"/> |
| 19. Body temperature [°F] | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> |
| 20. Blood pressure (mmHg) | <input type="text"/> <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> |
| 21. Heart rate / min. | <input type="text"/> <input type="text"/> <input type="text"/> |
| 22. Respiratory rate /min | <input type="text"/> <input type="text"/> <input type="text"/> |
| 23. Pulse rate /min. | <input type="text"/> <input type="text"/> <input type="text"/> |

| | (1) Yes | (2) No |
|-----------------|--------------------------|--------------------------|
| 24. Pallor | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. Jaundice | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. Clubbing | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. Cyanosis | <input type="checkbox"/> | <input type="checkbox"/> |
| 28. Pedal edema | <input type="checkbox"/> | <input type="checkbox"/> |

29. Lymphadenopathy ☐ ☐

30. Engorged veins ☐ ☐

CLINICAL EXAMINATION OF SKIN

31. SITE : _____

32. COLOUR: 1. Normal ☐ 2. Reddish ☐ 3. Black ☐

4. Silvery ☐

33. SIZE OF LESION (Length cm) :

34. SHAPE: 1. Round ☐ 2. Coined ☐ 3. Diffused ☐

35. ITCHING: 1. No ☐ 2. Mild ☐ 3. Moderate ☐ 4. Severe ☐

36. ERYTHEMA: 1. Present ☐ 2. Absent ☐

37. SCALING: 1. Present ☐ 2. Absent ☐

38. BLEEDING: 1. No ☐ 2. Mild ☐ 3. Moderate ☐ 4. Severe ☐

| | Yes (1) | No (2) |
|---------------|--------------------------|--------------------------|
| 39. PUSTULE : | <input type="checkbox"/> | <input type="checkbox"/> |

| | | |
|--------------|--------------------------|--------------------------|
| 40. PAPULE : | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------|--------------------------|--------------------------|

| | | |
|--------------|--------------------------|--------------------------|
| 41. MACULE : | <input type="checkbox"/> | <input type="checkbox"/> |
|--------------|--------------------------|--------------------------|

42. PIGMENTATION: 1. No ☐ 2. Hypo ☐ 3. Hyper ☐

43. SENSATION: 1. Normal ☐ 2. Anaesthetic ☐ 3. Hyperaesthetic ☐

44. CANDLE GREASE SIGN : 1. Present ☐ 2. Absent ☐

45. AUSPITZ SIGN : 1. Present ☐ 2. Absent ☐

46. KOEBNER'S PHENOMENON: 1. Present ☐ 2. Absent ☐

EXAMINATION OF VITAL ORGANS

(1) Normal (2) Abnormal

| | | | |
|------------|--------------------------|--------------------------|-------|
| 47.CVS | <input type="checkbox"/> | <input type="checkbox"/> | |
| 48.RS | <input type="checkbox"/> | <input type="checkbox"/> | |
| 49.ABDOMEN | <input type="checkbox"/> | <input type="checkbox"/> | |

SIDDHA ASPECTS

50.NILAM

1. Kurinji ☐ 2. Mullai ☐ 3. Marutham ☐ 4. Neithal ☐ 5. Palai ☐

51.KAALA IYALBU

1. Kaarkaalam ☐ 2. Koothirkaalam ☐ 3. Munpanikaalam ☐
4. Pinpanikaalam ☐ 5. Ilavenirkaalam ☐ 6. Muduvenirkaalam ☐

52.UDAL IYALBU

1. Vatham ☐ 2. Vatha pitham ☐ 3. Vatha kabam ☐
4. Pitham ☐ 5. Pitha vatham ☐ 6. Pitha kabam ☐
7. Kabam ☐ 8. Kaba vatham ☐ 9. Kaba pitham ☐

53.GUNAM

1. Sathuvam ☐ 2. Raasatham ☐ 3. Thamasam ☐

AYMPORIGAL

(1) Normal (2) Affected

| | | | |
|-----------|--------------------------|--------------------------|-------|
| 54.Mei | <input type="checkbox"/> | <input type="checkbox"/> | |
| 55.Vaai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 56.Kan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 57.Mookku | <input type="checkbox"/> | <input type="checkbox"/> | |
| 58.Sevi | <input type="checkbox"/> | <input type="checkbox"/> | |

KANMENDHIRIUM / KANMAVIDAYAM

(1) Normal (2) Affected

| | | | |
|-------------|--------------------------|--------------------------|-------|
| 59.Kai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 60.Kaal | <input type="checkbox"/> | <input type="checkbox"/> | |
| 61.Vaai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 62.Eruvaai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 63.Karuvaai | <input type="checkbox"/> | <input type="checkbox"/> | |

UYIR THAATHUKKAL

VAATHAM

(1) Normal (2) Affected

| | | | |
|------------|--------------------------|--------------------------|-------|
| 64.Pranan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 65.Abanan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 66.Viyanan | <input type="checkbox"/> | <input type="checkbox"/> | |

| | | | |
|----------------|--------------------------|--------------------------|-------|
| 67.Uthanan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 68.Samanan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 69.Nagan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 70.Koorman | <input type="checkbox"/> | <input type="checkbox"/> | |
| 71.Kirukaran | <input type="checkbox"/> | <input type="checkbox"/> | |
| 72.Devathathan | <input type="checkbox"/> | <input type="checkbox"/> | |
| 73.Dhananjeyan | <input type="checkbox"/> | <input type="checkbox"/> | |

PITTHAM

(1) Normal (2) Affected

| | | | |
|-------------|--------------------------|--------------------------|-------|
| 74.Analagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 75.Ranjagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 76.Sathagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 77.Alosagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 78.Prasagam | <input type="checkbox"/> | <input type="checkbox"/> | |

KABAM

(1) Normal (2) Affected

| | | | |
|----------------|--------------------------|--------------------------|-------|
| 79.Avalambagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 80.Kiletham | <input type="checkbox"/> | <input type="checkbox"/> | |
| 81.Pothagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 82.Tharpagam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 83.Santhigam | <input type="checkbox"/> | <input type="checkbox"/> | |

UDAL THAATHUKKAL

| | (1) Normal | (2) Affected | |
|---------------|--------------------------|--------------------------|-------|
| 84.Saaram | <input type="checkbox"/> | <input type="checkbox"/> | |
| 85.Senneer | <input type="checkbox"/> | <input type="checkbox"/> | |
| 86.Oon | <input type="checkbox"/> | <input type="checkbox"/> | |
| 87.Kozhuppu | <input type="checkbox"/> | <input type="checkbox"/> | |
| 88.Enbu | <input type="checkbox"/> | <input type="checkbox"/> | |
| 89.Moolai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 90.Sukkilam / | <input type="checkbox"/> | <input type="checkbox"/> | |
| Suronitham | | | |

ENVAGAI THERVUGAL

| | | | |
|-------------|--------------------------|--------------------------|-------|
| 91.Naa | | | |
| 92.Niram | <input type="checkbox"/> | <input type="checkbox"/> | |
| 93.Mozhi | <input type="checkbox"/> | <input type="checkbox"/> | |
| 94.Vizhi | <input type="checkbox"/> | <input type="checkbox"/> | |
| 95.Sparisam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 96.Naadi | | | |

- | | | | | | |
|-----------|--------------------------|-----------------|--------------------------|----------------|--------------------------|
| 1. Vatham | <input type="checkbox"/> | 2. Vatha pitham | <input type="checkbox"/> | 3. Vatha kabam | <input type="checkbox"/> |
| 4. Pitham | <input type="checkbox"/> | 5.Pitha vatham | <input type="checkbox"/> | 6. Pitha kabam | <input type="checkbox"/> |
| 7. Kabam | <input type="checkbox"/> | 8. Kaba vatham | <input type="checkbox"/> | 9. Kaba pitham | <input type="checkbox"/> |

MALAM

(1) Normal (2) Affected

| | | | |
|--------------|--------------------------|--------------------------|-------|
| 97.Niram | <input type="checkbox"/> | <input type="checkbox"/> | |
| | Yes (1) | No (2) | |
| 98.Nurai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 99.Kirumi | <input type="checkbox"/> | <input type="checkbox"/> | |
| 100. Kalappu | <input type="checkbox"/> | <input type="checkbox"/> | |
| 101. Erugal | <input type="checkbox"/> | <input type="checkbox"/> | |
| 102. Elagal | <input type="checkbox"/> | <input type="checkbox"/> | |

MOOTHIRAM

Neerkuri

(1) Normal (2) Affected

| | | | |
|------------|--------------------------|--------------------------|-------|
| 103. Niram | <input type="checkbox"/> | <input type="checkbox"/> | |
| 104. Manam | <input type="checkbox"/> | <input type="checkbox"/> | |
| 105. Edai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 106. Nurai | <input type="checkbox"/> | <input type="checkbox"/> | |
| 107. Enjal | <input type="checkbox"/> | <input type="checkbox"/> | |

Neikuri 1. Vaatha Neer ☐ 2. Pittha Neer ☐ 3. Kaba Neer ☐

LAB INVESTIGATIONS

BLOOD

108. TC (cells/ cu.m.m)

| | | | | |
|--|--|--|--|--|
| | | | | |
|--|--|--|--|--|

DC (%):109N.

| | |
|--|--|
| | |
|--|--|

 110.L

| | |
|--|--|
| | |
|--|--|

 111.M

| | |
|--|--|
| | |
|--|--|

 112.E

| | |
|--|--|
| | |
|--|--|

 113.B

| | |
|--|--|
| | |
|--|--|

114. **ESR** (mm) ½ Hr

| | |
|--|--|
| | |
|--|--|

 115. ESR (mm): 1 Hr:

| | |
|--|--|
| | |
|--|--|

116. **Hb** (g %)

| | |
|--|--|
| | |
|--|--|

.

Blood Sugar (mg%) : 117. Fasting

| | | |
|--|--|--|
| | | |
|--|--|--|

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| |
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118 Post-prandial

| | | |
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119 Random

| | | |
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| | | |
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| |
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120. Blood Urea (mg%) :

| | |
|--|--|
| | |
|--|--|

| |
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| |
|--|

121. Serum Creatinine :

| | |
|--|--|
| | |
|--|--|

| |
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| |
|--|

122. Blood Cholesterol (mg%) :

| | | |
|--|--|--|
| | | |
|--|--|--|

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URINE

123. Albumin - 0.Nil

| |
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 1.+

| |
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| |
|--|

 2.++

| |
|--|
| |
|--|

 3.+++

| |
|--|
| |
|--|

124. Sugar - 0.Nil

| |
|--|
| |
|--|

 1.+

| |
|--|
| |
|--|

 2.++

| |
|--|
| |
|--|

 3.+++

| |
|--|
| |
|--|

| Deposit: | Present (1) | Absent (2) |
|-----------------------|--------------------------|--------------------------------|
| 125. Pus cells | <input type="checkbox"/> | <input type="checkbox"/> _____ |
| 126. Epithelial cells | <input type="checkbox"/> | <input type="checkbox"/> _____ |
| 127. Red blood cells | <input type="checkbox"/> | <input type="checkbox"/> _____ |
| 128. Casts/ Crystal | <input type="checkbox"/> | <input type="checkbox"/> _____ |

| MOTION | Present (1) | Absent (2) |
|---------------------|----------------------------|--------------------------------|
| 129. Ova | - <input type="checkbox"/> | <input type="checkbox"/> _____ |
| 130. Cyst | - <input type="checkbox"/> | <input type="checkbox"/> _____ |
| 131. Occult blood - | <input type="checkbox"/> | <input type="checkbox"/> _____ |
| 132. Pus cells | - <input type="checkbox"/> | <input type="checkbox"/> _____ |

Drug issued for patients.

133. No. of vadagam:

134. Volume of Thylam (ml) :

135. Date: _____ 136. Signature of Doctor: _____

137. Station: _____ 138. Signature of H.O.D: _____

BIBLIOGRAPHY

1. Agasthiar Vaithiyam Pin Yenpathu
2. Agasthiar Guna Vagadam
3. Agasthiar Kanma Kandam
4. Agasthiar Paripooranam – 400
5. Agasthiar Vaidhya Kaviyam – 1500
6. Dermatology in General Medicine –
Thomas B Fitzpatrick
Arthur Z. Eisen
Klaus Wolff
6. Gunapadam – Mooligai
7. Dr.K.M.Nadkarni's Indian Materia Medica
8. Noi Naadal Vol.I
9. Pharmacopeia of Siddha Research Medicines. – G.T.Naidu
10. Patharatha Guna Chinthamani
11. Roxburgh's Common Skin Diseases – Ronald Marks
12. Siddha Maruthuvam Part I - Dr.Kuppusamy Mudaliar
13. Siddha Maruthuvam Sirappu – Dr.R.Thiyagarajan
14. Siddha Maruthuvanga Churukkam
15. Siddhar Aruvai Maruthuvam - Dr.Uthma Rayan
16. Siddha Vaithya Pathartha Guna Vilakkam –
Kannasamiyam pillai
17. Text book of Dermatology – BHEL
18. Thirukkural
19. Thirumoolar Vaidhyam 600
20. Udal Thathuvam
21. Wealth of India
22. Yugi Vaidhya Chinthamani

Websites:

23. Psoriasis net.org
24. Psoriasis.org

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